

## Appendix D – Wild and Scenic Rivers Evaluation

### Introduction

The Wild and Scenic Rivers Act of 1968 established a policy for preserving selected rivers in a free-flowing condition that would balance the development of water, power and other resources on rivers of the United States. Rivers are eligible to be considered for inclusion in the National Wild and Scenic Rivers System if they are free flowing (without major dams, diversions or channel modifications) and if they possess at least one “outstandingly remarkable” scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar value. These values should be a unique or exceptional representation for the area studied, and must be related to the river or its immediate environment. For purposes of eligibility evaluation the minimum area considered as a river corridor boundary was the area within 1/4 mile of either side of the high water mark of the river. However, features outside this minimum corridor were also considered if their inclusion was essential for protection of the outstandingly remarkable values of the river.

Portions of several eligible rivers are located on private lands (inholdings) not managed by the Chugach National Forest. Each of the land owners, including other federal agencies, the State of Alaska, Chugach Alaska Corporation (CAC) and others were contacted during the river study process to find out if they would be interested in working with the Forest Service to potentially recommend a segment of a river that flows through their land for designation as a Wild and Scenic River. The State of Alaska and other private landowners were not interested in recommending a congressional designation on their lands. However, they did indicate a willingness to protect river-related values on their lands using their own policies. Both the U.S. Fish and Wildlife Service and the National Park Service were interested in working with the Forest Service to recommend a river for designation involving their lands.

Eligible rivers are classified as either “Wild,” “Scenic” or “Recreational” based on the degree of access and amount of development along the river area. Designated river segments are classified and administered under one of the following, according to definitions in the Wild and Scenic Rivers Act:

**Wild River areas:** Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

**Scenic River areas:** Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines undeveloped, but accessible in places by roads.

**Recreational River areas:** Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The evaluation for the Chugach National Forest was conducted for the purpose of determining the eligibility, potential classification, and suitability (by alternative) of rivers. All named rivers (760+) and many unnamed rivers were examined and evaluated to identify “outstandingly remarkable” river related features which would make them “eligible” for further consideration under the National Wild and Scenic Rivers System. All special river-related features identified were documented on river data attribute sheets for each river. An interdisciplinary team of resource specialists evaluated all of the features and found 23 rivers with a total length of 350.3 miles to have one or more outstandingly remarkable features. The determination of eligibility is the result of a process that is fully described in a document entitled: ***Guidelines for Assessing Outstandingly Remarkable River Related Features*** (Chugach National Forest). (For a fuller description of river management under the different classifications, see FEIS, Chapter 3, Wild and Scenic Rivers).

Determination of suitability represents an assessment as to whether or not eligible river segments should be recommended for inclusion in the National Wild and Scenic Rivers System by Congress.

The purpose of this appendix is to address the six factors identified in Section 4(a) of the Wild and Scenic Rivers Act. These are:

- 1) Characteristics which do or do not make the area a worthy addition to the National Wild and Scenic Rivers System;
- 2) The current status of land ownership and use in the area;
- 3) The reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed if the area were included in the National Wild and Scenic Rivers System;
- 4) The federal agency that will administer the area should it be added to the National Wild and Scenic Rivers System;
- 5) The extent to which the Forest Service proposes that administration of the river, including the costs thereof, be shared by state and local agencies; and,
- 6) The estimated cost to the United States of acquiring necessary lands and interests in lands and of administering the area should it be added to the National Wild and Scenic Rivers System.

The Interdisciplinary Team and the Regional Forester also considered two additional suitability factors.

- 1) Because of the level of public participation throughout the planning process, an important factor was an assessment of the public support or opposition to designation. This involved an assessment of whether designation would help or impede the “goals”, needs or desires of other tribal, federal, state or local agencies, communities or private landowners.
- 2) Another consideration included an assessment of whether or not designation as a Wild and Scenic River was the best method of protecting a river’s free-flowing character, water quality and outstandingly remarkable values.

This appendix includes a map of each eligible river showing the location of the river management corridor and the classification of the river based upon its condition at the time of the study. Also shown on each map are any land encumbrances that could affect a suitability determination.

Each river description is divided into the following sections:

**Description:** Location, significant uses, special features, and geographic province.

**Eligibility:** Outstandingly remarkable values that caused the river to be considered “eligible” are described.

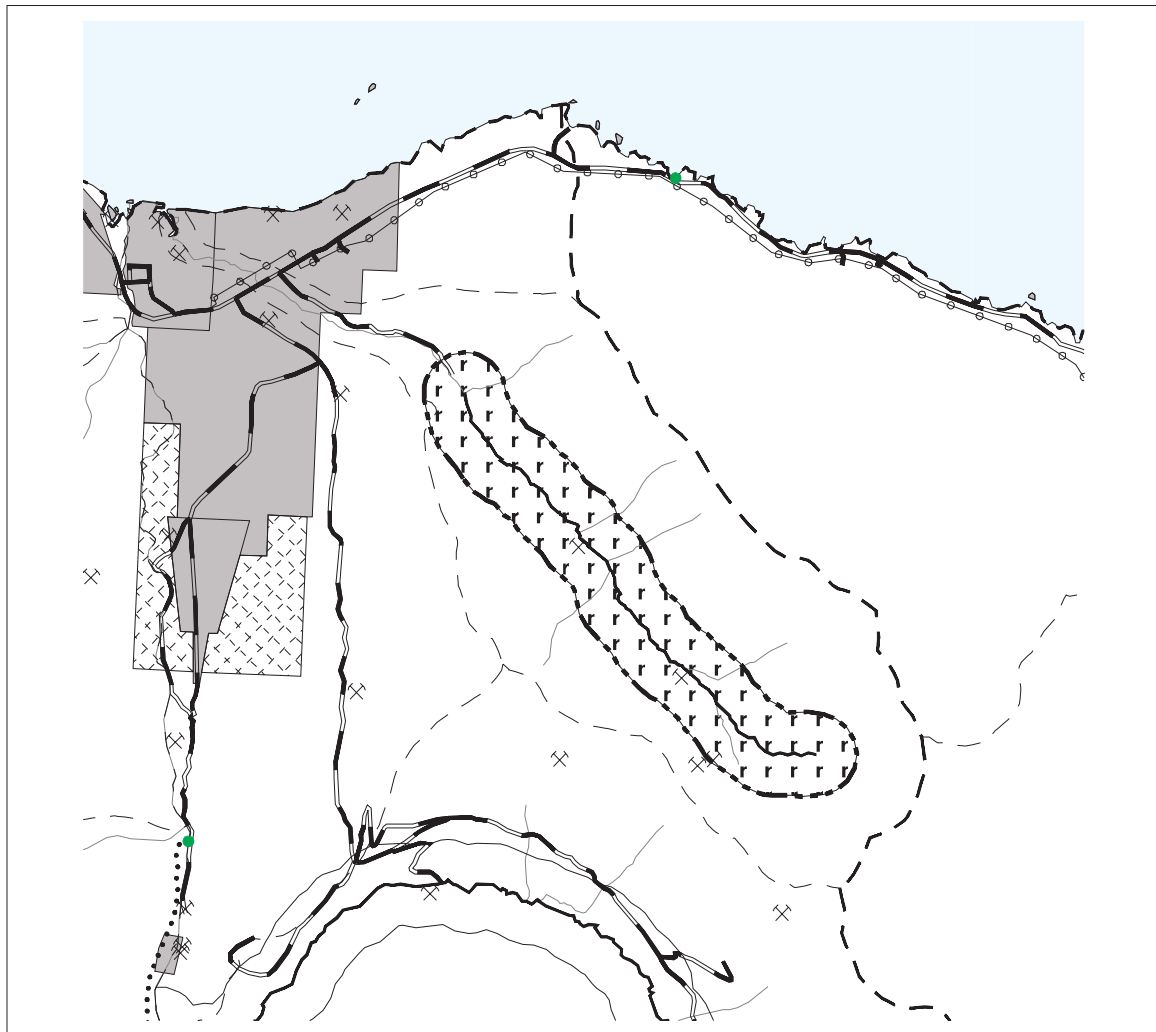
**Classification:** The potential classification as Wild, Scenic, or Recreational River designation is described, based on the amount of development and modification existing in the river corridor.

**Alternatives:** The recommended allocation of streams by classification (Wild, Scenic, or Recreational) by alternative is displayed.

**Suitability:** The suitability analysis addresses the six factors identified in Section 4(a) of the Wild and Scenic Rivers Act and two additional factors explained above. It includes a discussion of the consequences of designating or not designating the river as a component of the National System and the cost of managing the river as a Wild and Scenic River is estimated.

**Suitability and Nonsuitability Determinations:** The determination of whether a river is suitable or unsuitable and a summary of the rationale for the determination.

# Wild and Scenic Rivers Eligibility Study BEAR CREEK Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Bear Creek</b>
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**Description**

Bear Creek is located on the Seward Ranger District, Chugach National Forest near the community of Hope, Alaska, within the Alaska Mixed Forest Province. The lower portion of Bear Creek flows through the town of Hope and is crossed by the Hope State Highway. The river has undergone some development in the past associated with mining activity. Remains of a lode mine are located near the head of the creek. The area is accessible by mining road up about 2 1/2 miles and by 4x4 road up to the head of the creek. The eligible river segment is 3.4 miles long.

**Eligibility**

The outstandingly remarkable value associated with Bear Creek is a geologic feature. This creek has produced some of the region's largest gold nuggets (up to 3 pounds).

**Classification**

Recreational River. The lower portion of Bear Creek flows through the town of Hope and is crossed by the Hope State Highway.

**Alternatives**

Alternative F: Recreational River for all 3.4 miles.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Bear Creek has produced some coarse gold nuggets, outstanding within the Kenai Peninsula and Southcentral Alaska. This implies that some unique geologic processes are occurring or have occurred at Bear Creek. Charlie Toms found the largest nugget in 1988 on his placer mining claim, Tabatha, approximately 3 miles upstream of the mouth of Bear Creek. The next year a 17-ounce nugget was reportable found.

The Toms nugget was weighted at Oxfords Assayers at 34.6 troy ounces. Nuggets of this size are rare. It is within the top 20 largest nuggets ever found in the history of Alaska. (Tom Bundtzen, Alaska Division of Geologic and Geophysical Surveys personal communication) It is the largest nugget known to be from Southcentral Alaska. Doug Robuck, nugget dealer at Micheals Jewelry in Anchorage, has never handled a nugget as large as Toms' nugget in 15 years of buying and selling Alaska gold nuggets. BJWM Gold Shop in Hope Alaska, reports most of their nuggets weight in around a pennyweight (1/20 of a troy ounce). Gold is worth, on average, \$300 per ounce. Natural gold nuggets are used in jewelry making, and have a special "nugget value" above and beyond just the value of the gold they contain. The larger the nuggets are and the more interesting the shape, the more they are worth.

Nuggets are pieces of gold that can be picked up with the fingers. Only 3 percent of all placer gold mined is in nugget form. Most placer gold mined is in very tiny particles, much of it the consistency of powder. Processes that form

gold nuggets are not well understood. Two theories are proposed for nugget formation: one is that gold is in solution in the stream water and subsequently participates out to form nuggets, and the other is that the action of the flowing stream water actually pounds and welds small gold particles together to form larger nuggets. Both theories include the stream as a critical component of the nugget forming process.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership are located northwest of the eligible section of Bear Creek near the town of Hope. These lands include borough lands and state owned lands.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on near the eligible section of Bear Creek that would be curtailed by designation. Road access to existing mining claims may be necessary, such access would be allowed within a Recreational River corridor. Designation as a Recreational River would have little effect on known future road construction plans in the area.

*Water Resources:* Designation as a Recreational River would be unlikely to affect the future availability of water supplies or electric power.

*Mineral Resources and Geology:* There are numerous existing placer mining claims on Bear Creek. Small lode gold operations could become feasible in the Hope area. One building stone permit is currently active on the Forest near Hope where 15 to 30 tons are extracted each year. Most state and federal lands in this area are open to mineral entry. Designation as a Recreational River would allow for future minerals development work with appropriate mitigation of effects within the river corridor.

*Timber:* Most state and federal lands in this area are open to timber harvest. Designation as a Recreational River would allow for future timber harvest with appropriate mitigation of effects within the river corridor. There are 30 acres of tentatively suitable timberland within the river corridor. Alternatives A, B and the No Action Alternative would allow timber harvest to be scheduled in this area. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* One of the primary management goals in the Revised Forest Plan for the area around Hope is to conserve fish and wildlife habitat values and manage the dead spruce fuels build-up in the area. Designation of the river would help protect fisheries values but would restrict the construction of some instream fish habitat enhancement structures. Both mechanical fuels treatment methods and prescribed fire is allowed in this area in the Preferred Alternative.

*Recreation, Scenery:* Designation as a Recreational River would have little effect on the recreation values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use, which could result from designation, may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area is expected if the river were not designated since the history of large gold nugget discovery would remain.

**Suitability Factor #4:** Public, state and local governmental interests. As per the Kenai Area Plan, management intent for state owned lands near Hope (units 285, 286 and 291, Seward D-7 and D-8) is to manage as multiple use land to allow a variety of uses and to protect existing resource values. Some lands are designated as mineral material lands to be managed to allow for exploration and development of sand and gravel resources. Designation of the river as a Recreational River would not affect state management intent in the vicinity.

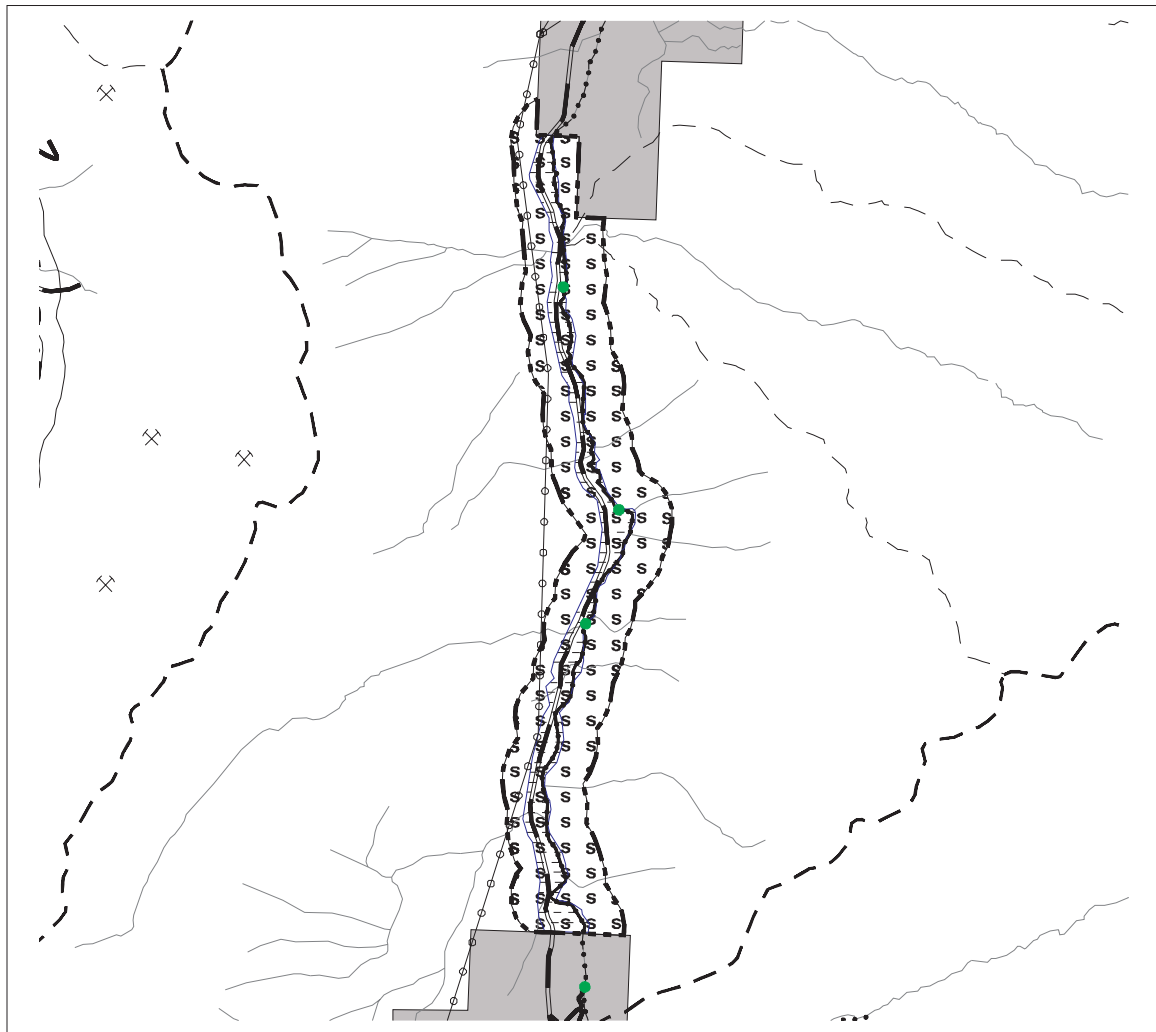
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

The Revised Forest Plan and all alternatives except Alternative F recommended non-designation. The theme of Alternative F is to recommend all eligible areas for congressional designation. Several public comments were received from people who felt that Bear Creek is not a worthy addition to the National Rivers System because of the amount of mining activity that has occurred in the river corridor in the past. Designation as a Recreational River could affect the operations of active mining claimants on the river because of additional mitigation measures that may be required. The spruce bark beetle has heavily damaged timberlands in the vicinity of Bear Creek. Complete treatment of these stands may not be compatible with a Recreational River designation.

# Wild and Scenic Rivers Eligibility Study SIXMILE CREEK Chugach National Forest



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## LEGEND

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|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001



<b>Sixmile Creek</b>
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**Description**

Sixmile Creek is located within the Alaska Mixed Forest Province. Sixmile Creek provides a highly scenic, road accessible, Class IV to V whitewater boating experience. Whitewater opportunities on Sixmile are unparalleled on the Kenai Peninsula. The lower four miles of Sixmile Creek and the area at its confluence with Canyon Creek and East Fork Sixmile Creek are on Alaska State lands. The eligible river segment is 5.7 miles long.

**Eligibility**

The outstandingly remarkable values associated with Sixmile Creek are whitewater boating, scenery and visual features.

**Classification**

Scenic River. Sixmile Creek is accessible by the Hope road in at least three places. Although the road parallels the river it generally stays out of the river canyon and the shorelines are largely undeveloped.

**Alternatives**

Alternatives B and the Preferred Alternative: Recreational River for all 5.7 miles. Alternatives C, D, E, and F: Scenic for all 5.7 miles.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Sixmile is renown, regionally and nationally, as a high-quality, sustained-difficult whitewater experience. The river is very popular with local expert whitewater boaters, and is currently permitted for 750 service days by five commercial guiding operations. Guided clients generally float the river in rafts (with oars and/or paddles), while private parties use both kayaks and rafts.

Access to the whitewater is located at Mile 59.5 of the Seward Highway on East Fork Sixmile Creek. Between this access point and the junction of East Fork Sixmile Creek and Canyon Creek about 2 miles downstream, the river passes through the "First Canyon." The canyon quickly deepens to about 60 feet with steep to vertical bedrock walls. Within the canyon, boaters negotiate a series of large drops, and pass through several pools and glide sections. The clear to turquoise waters of East Fork Sixmile Creek add to the splendor of this canyon stream segment. The Seward Highway, though close to the river, is generally not visible from the water. This lends a sense of remoteness within this steep canyon segment.

From the stream junction at the Hope "Y," Sixmile Creek extends downstream for over 3 miles with a Class II whitewater difficulty. The river flows parallel to, and within a quarter mile of the Hope Highway. The river valley broadens out and the volume of water in the creek nearly doubles. Three separate "put-in/take-out" points are frequently used along this river section, and small segments of the Hope Highway can be seen from the river. Floaters take in scenic views of the

broad, forested valley bottom and side slopes and alpine areas from this stretch of meandering river. Avalanche paths on the east slope extend all the way down to, and even across the river, offering majestic views of higher alpine areas.

At Mile 3.3 of the Hope Highway, Sixmile Creek enters the "Second Canyon." This is a quarter-mile river segment with a series of steep drops. This canyon cannot be seen from the Hope Highway, but is readily accessed by a trail from the highway.

The river next travels through a deeply forested section of about a mile with Class II to III white water. At about Mile 5 of the Hope Highway, Sixmile Creek enters the "Third Canyon." This is the longest and most difficult of the three canyons. This canyon extends for about three miles and requires negotiating a long series of steep drops of Class IV to V whitewater. Sheer canyon walls up to 100 feet high hide this canyon from view and add to the wildness of the river experience. At the end of this canyon, the river broadens out and offers views of the Chugach Range across Turnagain Arm. A river take-out point is available just beyond the end of the Third Canyon, close to Mile 7 of the Hope Highway.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership are located north and south of the eligible section of Sixmile Creek on federal land. The lands in other ownership, to the north, near the town of Sunrise include borough and state owned lands. Lands in other ownership, to the south, near the confluence of Sixmile Creek, East Fork Sixmile Creek and Canyon Creek (Hope Y area) are state owned.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on or near the eligible section of Sixmile Creek that would be curtailed by designation. Designation as a Scenic River would have little effect on known future road construction plans in the area.

*Water Resources:* Designation as a Scenic River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* There are placer mining claims along the river. Most state and federal lands in this area are open to mineral entry. Designation as a Scenic River would allow for future minerals development work with appropriate mitigation of effects within the river corridor.

*Timber:* Most state lands in this area are open to timber harvest scheduling. Designation as a Scenic River would allow for future timber harvest with appropriate mitigation of effects within the river corridor. There are 10 acres of tentatively suitable timberland within the river corridor. Alternatives A, B and the

No Action Alternative would allow timber harvest to be scheduled in this area. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* One of the primary management goals of the Sixmile Creek area is to conserve fish and wildlife habitat values. Designation of the river would help protect fisheries values but would restrict the construction of some instream fish habitat enhancement structures. Both mechanical fuels treatment methods and prescribed fire is allowed in this area in the Preferred Alternative.

*Recreation, Scenery:* One of the primary management goals of the Revised Forest Plan for this management area is to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed settings. Designation, as a Scenic River would help to protect the outstandingly remarkable scenery and whitewater boating values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase but river resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic values could be adversely affected if the river were not designated as a Recreational River because of potential instream developments that would affect river flow. Other developments in the watershed may adversely affect scenery. Timber harvest within the river corridor is not likely because there are only 10 acres that are tentatively suitable for harvest. Potential timber harvest adjacent to the river corridor in Alternatives A, B, and No Action would likely be visible from the river corridor.

**Suitability Factor #4: Public, state and local governmental interests.** As per the Kenai Area Plan, management intent for state owned lands near the town of Sunrise and the Hope Y (units 281, 282, 283, and 284) is to manage as multiple use land to allow a variety of uses and to protect existing resource values. Designation of the river as a Scenic River would probably not affect state management intent in the vicinity.

On October 18, 1991, Public Land Order 6892 withdrew 473 acres of National Forest System lands from surface entry and mining for a period of 20 years to protect the Sixmile Creek Recreation Area. The lands have been and will remain open to mineral leasing.

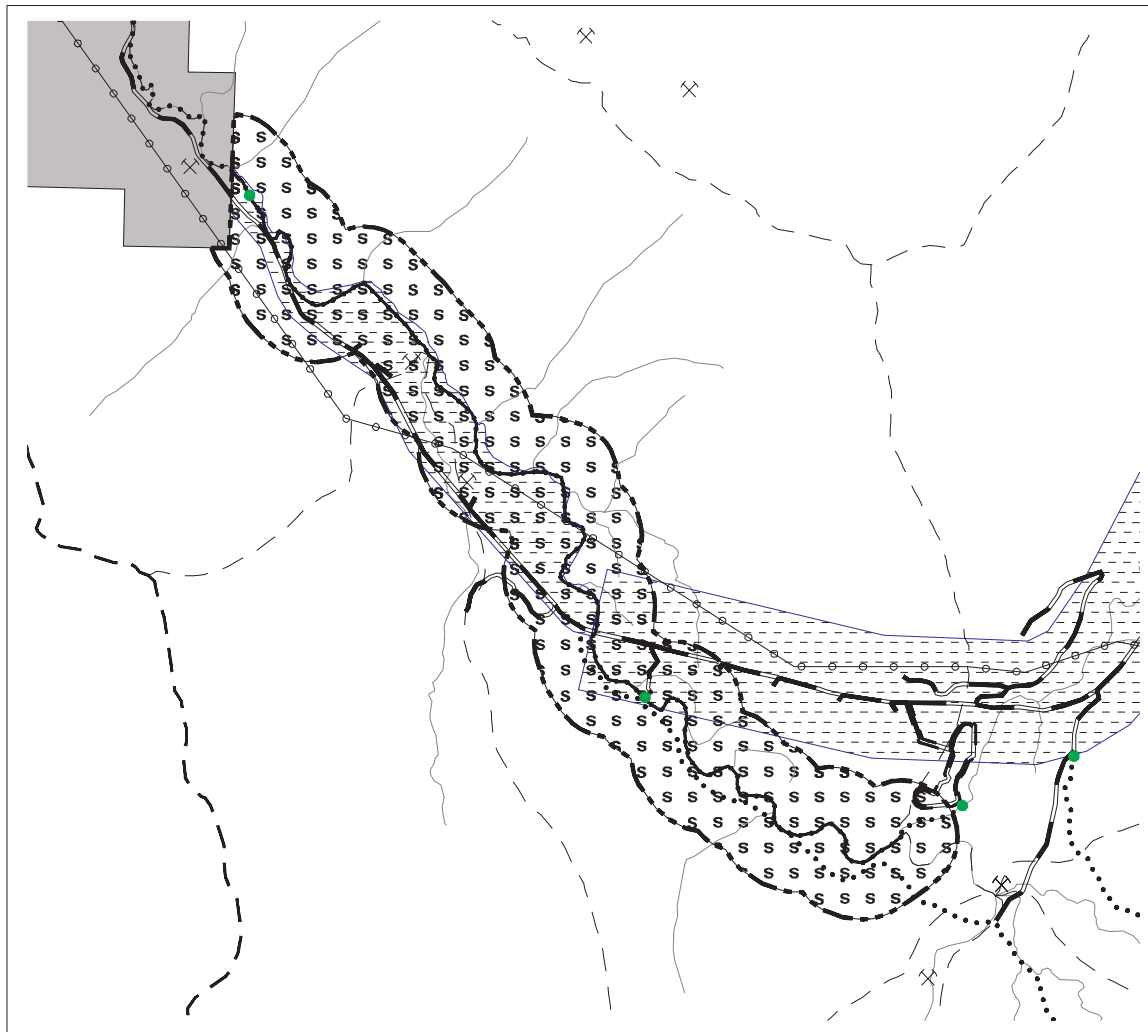
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$21,500</b>

**Suitability and Nonsuitability Determinations:**

Sixmile Creek is recommended for classification in all alternatives except Alternative A and the No Action Alternative. The theme of Alternative A was to recommend no congressional designations. Wild and Scenic Rivers were not considered in the No Action Alternative. Designation of Sixmile Creek would have a positive affect on the economic interests of commercial guiding operations on the river. Public comments received both during the scoping period and on the DEIS and Proposed Revised Forest Plan were primarily supportive of recommending Sixmile Creek for designation. Designation of Sixmile Creek would not impact future management of winter and summer motorized and nonmotorized recreational activities in the vicinity. It would allow some development of recreation facilities and new trails to accommodate river users. Designation of Sixmile Creek is consistent with the active management theme envisioned for the Kenai Peninsula. Designation would not foreclose options for the State of Alaska to manage their lands located above and below the eligible section on federal land.

# Wild and Scenic Rivers Eligibility Study EAST FORK SIXMILE CREEK Chugach National Forest



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## LEGEND

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|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>East Fork Sixmile Creek</b>
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**Description**

East Fork Sixmile Creek is located within the Alaska Mixed Forest Province. A portion of this river, at its confluence with Sixmile and Canyon Creeks, is on Alaska State lands. The creek is popular with many rafters, canoers, and kayakers seeking an easy to moderate boating experience (Class I and II). Guided float trips along this section of the creek are provided. The river is almost 7 miles long; with the eligible segment of the river through National Forest System lands being 5.6 miles.

**Eligibility**

The outstandingly remarkable values associated with East Fork Sixmile Creek are recreational whitewater boating, scenery and visual features.

**Classification**

Scenic River. East Fork Sixmile Creek is crossed by the Seward Highway at one point and is accessible by the highway in another spot. It is also accessible in two other locations by low standard roads. The river shorelines are largely undeveloped.

**Alternatives**

Alternatives B, C and Preferred Alternative: recommendation of the entire 5.6 miles as Recreational. Alternatives D, E and F: recommendation of the entire 5.6 miles as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The East Fork Sixmile Creek from the confluence of Granite and Center Creeks downstream to the junction with Canyon Creek provides a highly scenic float for almost 7 miles. The creek begins adjacent to the Granite Creek campground, in the center of two joining valleys. Steep, glacially formed valley walls parallel the creek as it meanders downstream. Gentle rapids, varying creek widths, and clear and turquoise-colored water combine in creating the scenic beauty of the creek. The upper sections of the creek are tree lined with a mix of hardwoods and conifers. Frequent breaks in the vegetation provide views up and down the valley and of the surrounding mountains. The Seward Highway National Scenic Byway crosses the creek about two miles downstream for the confluence and parallels the creek in several locations. A power line also crosses the creek and is visible for short periods of time.

As the creek continues downstream, the valley narrows and the character of the landscape changes. The last 2 miles provide an enclosed, narrow canyon and rapids setting sharply contrasting the open valley landscape of the upper portions of the creek.

In the fall, the hardwoods turn a dramatic golden yellow, providing a stunning color contrast between the conifers, hardwoods and turquoise colored water.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership are located north and south of the eligible section of Sixmile Creek on federal land. The lands in other ownership, to the north, near the town of Sunrise include borough and state owned lands. Lands in other ownership, to the south, near the confluence of Sixmile Creek, East Fork Sixmile Creek and Canyon Creek (Hope Y area) are state owned.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on near the eligible section of East Fork Sixmile Creek that would be curtailed by designation. Designation as a Scenic River would have little effect on known future road construction plans in the area.

*Water Resources:* Designation as a Scenic River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* There are placer mining claims within the river corridor. Most state and federal lands in this area are open to mineral entry. Designation as a Scenic River would allow for future minerals development work with appropriate mitigation of effects within the river corridor.

*Timber:* Most state lands in this area are open to timber harvest. Designation as a Scenic River would allow for future timber harvest with appropriate mitigation of effects within the river corridor. There are 80 acres of tentatively suitable timberland within the river corridor. Alternatives A, B, and the No Action Alternative would allow timber harvest to be scheduled in this area. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* The Revised Forest Plan provides direction to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed settings. Designation of the river would help protect fisheries values but would restrict the construction of some instream fish habitat enhancement structures.

*Recreation, Scenery:* The Revised Forest Plan provides direction to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed settings. Designation as a Scenic River would help to protect the outstandingly remarkable scenery and whitewater boating values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase but river resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic values could be adversely affected if the river were not designated as a Recreational River. Timber harvest within the river corridor is not likely because there are only 80 acres that are tentatively suitable for harvest. Potential timber harvest adjacent to the river corridor in Alternatives A, B and the No Action Alternative would likely be visible from the river corridor.

**Suitability Factor #4: Public, state and local governmental interests.** As per the Kenai Area Plan, management intent for state owned lands near the Hope Y (Unit 281) is to manage as multiple use land to allow a variety of uses and to protect existing resource values. Designation of the river as a Scenic River would probably not affect state management intent in the vicinity.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

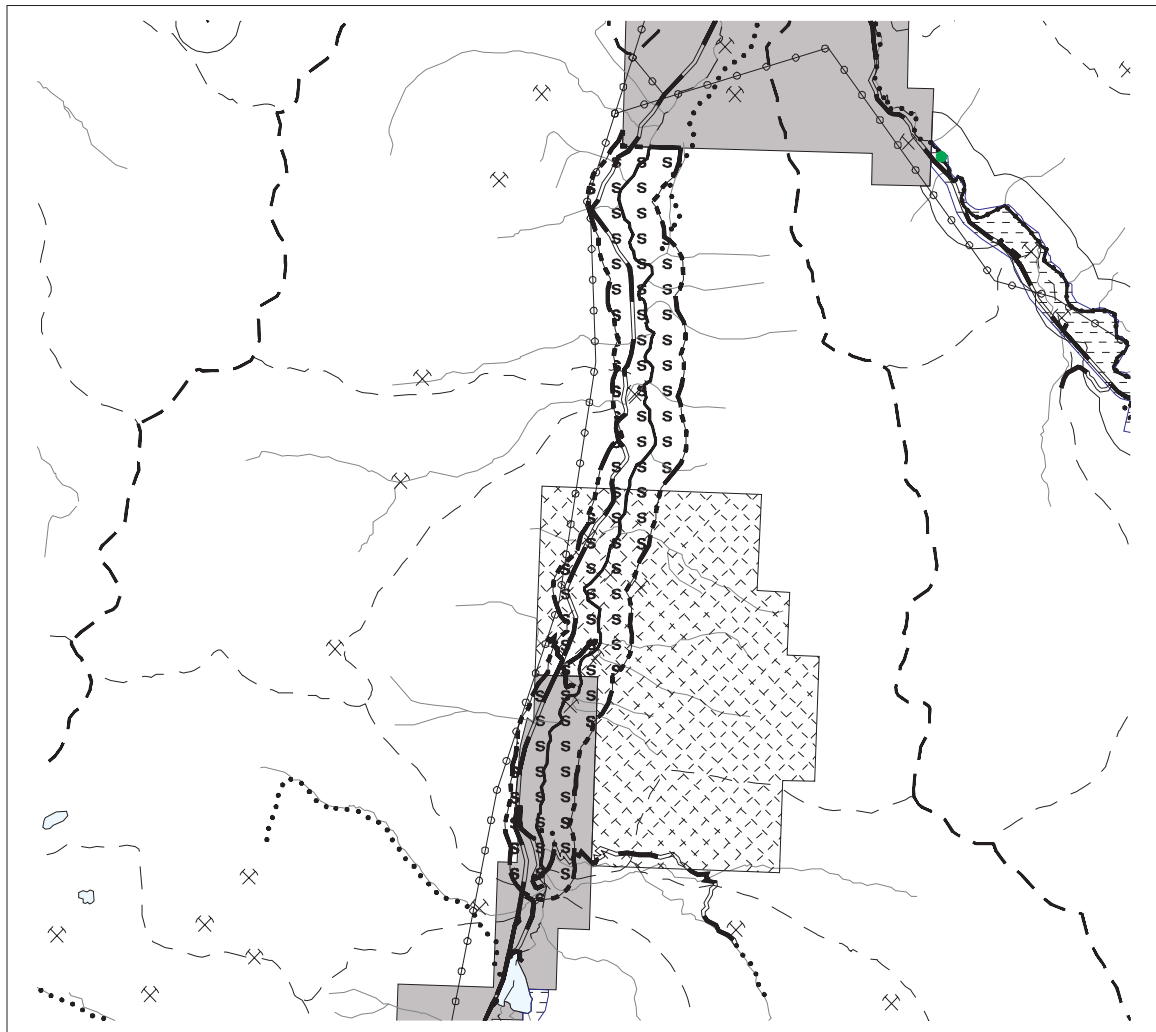
General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$21,500</b>

#### **Suitability and Nonsuitability Determinations:**

East Fork Sixmile Creek is recommended for inclusion in the National Wild and Scenic River System in all alternatives except Alternative A and the No Action Alternative. The theme of Alternative A was to recommend no congressional designations. Wild and Scenic Rivers were not considered in the No Action Alternative. Public comments received both during the scoping period and on the DEIS and Proposed Revised Forest Plan were primarily supportive of recommending East Fork Sixmile Creek for designation. Designation of the East Fork Sixmile Creek would not impact future management of winter and summer motorized and nonmotorized recreational activities in the vicinity. It would allow some development of recreation facilities and new trails to accommodate river users. Designation of this river is consistent with the active management theme for the Kenai Peninsula. Designation of the river would not foreclose options for the State of Alaska to manage their lands located above and below the eligible section on federal land.



# Wild and Scenic Rivers Eligibility Study CANYON CREEK Chugach National Forest



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## LEGEND

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|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Canyon Creek</b>
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**Description**

Canyon Creek is located within the Western Kenai Mountains Province. A portion of the river at its confluence with Sixmile and East Fork Sixmile Creeks is located on Alaska State land. Another segment of this creek is located on Alaska State selected land. The river is 8 miles long; with the eligible segment of the river flowing through National Forest System lands being 6.8 miles.

**Eligibility**

The outstandingly remarkable value associated with Canyon Creek is a geologic feature. The eight-mile canyon is remarkable for both its length and depth and is unrivaled in the region in those respects.

**Classification**

Scenic River: The Seward Highway runs parallel to Canyon Creek but is located out of the stream canyon. Canyon Creek is accessible by non-system roads in five places. Shorelines are largely undeveloped.

**Alternatives**

Alternatives E and F: Recommendation of the entire 6.8 miles on federal land as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Canyon Creek flows for eight miles through a narrow canyon ranging in depth from 100 to 200 feet or more, extending from its confluence with Mills Creek to some 600 to 800 feet above its confluence with Sixmile Creek. This deep channel is incised into a broader U-shaped glacial valley.

Canyon Creek is an exemplary example of locally rich auriferous gravels (gold-bearing). Placer gold occurs both in the current stream channel and in high bench gravels. Mining on Canyon Creek has been carried on with some difficulty caused by its narrow channel and swift waters. Never the less, the creek has been mined since the late 1800s. Hydraulic mining has been used with some success, but recent activities are almost entirely suction dredging. The gold is generally coarse and the distribution erratic. Small, but often very rich pockets of gold are still being mined today. Total production has been estimated at 35,000 to 40,000 ounces of gold to date. It has the second highest production on the entire Chugach National Forest.

Canyon Creek offers a sustained-difficult whitewater run over its entire length. The river has continuous Class III to Class IV rapids, with one "unrunnable" falls that must be portaged. Due to its narrow, confined character, and the tight, technical whitewater, kayaks mostly run the river. Optimal boating is at higher water stages, generally during peak snowmelt in June. Canyon Creek is generally considered a "notch up" in difficulty from Sixmile Creek. Canyon Creek

and the lower two canyons of Sixmile Creek can be run in sequence as a singularly sustained and difficult float.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership are located to the north and there are selected lands to the south of the eligible section of Canyon Creek on federal land. Lands in other ownership, to the north, near the confluence of Sixmile Creek, East Fork Sixmile Creek and Canyon Creek (Hope Y area) are state owned and the area within the eligible river corridor, near Summit Lakes, is state selected.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on near the eligible section of Canyon Creek that would be curtailed by designation. Designation as a Scenic River would have little effect on known future road construction plans in the area.

*Water Resources:* Designation as a Scenic River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Scenic River would allow for future minerals development work with appropriate mitigation of effects within the river corridor. Designation would not affect the outstandingly remarkable canyon structure of Canyon Creek.

*Timber:* None of the land within the river corridor is tentatively suitable for timber harvest. Most state lands in this area are open to timber harvest.

*Fisheries and Wildlife:* The theme for this area in the Revised Forest Plan is to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed recreation settings. Designation of the river would help protect fisheries values but would restrict the construction of some instream fish habitat enhancement structures that would divert flows.

*Recreation, Scenery:* The theme for this area in the Revised Forest Plan is to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed recreation settings. Designation as a Scenic River would help to protect the recreation and scenery values of the area. Some increase in recreation use may be likely, and requests by commercial outfitters and guides for use of the river corridor may increase but river resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance

of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* There is no land that is tentatively suitable for timber harvest within the river corridor. The outstandingly remarkable geologic feature would not likely be adversely affected if the river were not designated as a scenic river.

**Suitability Factor #4: Public, state and local governmental interests.** As per the Kenai Area Plan, management intent for state owned lands near the Hope Y (Unit 281) is to manage as multiple use land to allow a variety of uses and to protect existing resource values. Management intent for state selected lands near Summit Lakes (Unit 410, Seward C-7 Summit Lake) is a recreation designation that is to encourage providing access to state land for a wide variety of public uses, such as camping, berry picking, hunting and fishing. The Kenai Area Plan will support economic development in tourism by allowing use of state land for commercial recreation leasing. Units 410 A and B, Seward C-7 have a Material Land designation that is to protect existing and potential material resources on state land for future extraction. Unit 410 C, Seward C-7 (Summit) has a Settlement Land designation that is to encourage a balance between private and public use of state land to allow people to pursue a desired lifestyle. There will be a variety of opportunities, including fee land sales, and long-term use authorizations. To make management of land more efficient, small, isolated parcels of state land will be identified for sale.

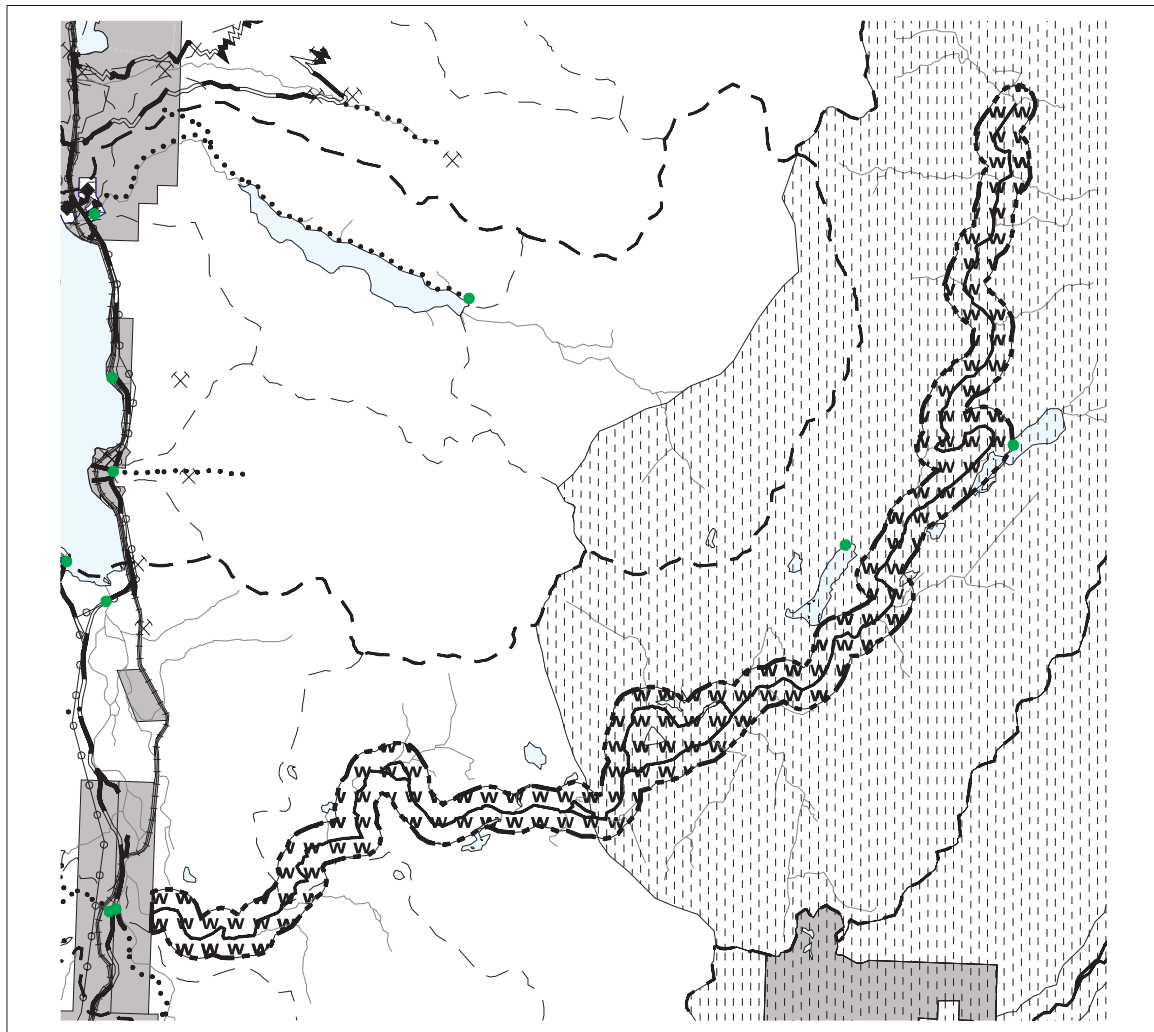
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$21,500</b>

#### **Suitability and Nonsuitability Determinations:**

Canyon Creek is only recommended for designation in Alternatives E and F. These two alternatives have a similar emphasis on the designation of all eligible rivers. It is not recommended in the Preferred Alternative because there were relatively few comments on Canyon Creek expressing support for designation. Designation as a Scenic River could affect the operations of active mining claimants on the river because of additional mitigation measures that may be required. The creek flows through state owned lands above and below the eligible section of the creek located on National Forest System land. A portion of the section of the creek on federal land is selected for possible conveyance to the state. Designation of the creek may not be compatible with the management objectives for state land.

# Wild and Scenic Rivers Eligibility Study SNOW RIVER Chugach National Forest



0mi 1mi 2mi 3mi 4mi 5mi 6mi 7mi

## LEGEND

Recreational Designation	Proposed Research Natural Areas	Potential Bering River Access
Scenic Designation	Boundaries of Eligible Buffered Stream or Water Body	Powerline Corridors
Wild Designation	Watershed Boundaries	Railroad
Other Ownership	Association Boundaries	Trails
Selected Lands	Streams	Mining Claim as of 1994
Withdrawals	Eligible Stream or Water Body	Recreation Sites
Recommended Wilderness or Wilderness Study Area	Existing Roads	Facilities



July 12, 2001

<b>Snow River</b>
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**Description**

Beginning high in the mountains, Snow River is the focal feature as its braided channels wind through the open terrain of Paradise Valley and into the forest covered portions along the lower stretches of the river. Heavy with glacial silt, the turquoise blue color is striking.

Snow River is a dominant feature in the landscape. Traveling through the middle of a classically U-shaped valley, spectacular views of glaciers and mountain peaks line both sides of the valley. From its glacial origins, the river passes through alpine, shrub and forest before ending in Kenai Lake. The eligible river segment is 23.8 miles long. At the 14.7 mile mark the canyon restricts to a narrow gorge.

**Eligibility**

The outstandingly remarkable values associated with Snow River are scenery and visual features.

**Classification**

Wild River. From the Alaska Railroad Bridge, upstream, the 23.8 miles of the Snow River is inaccessible by road and is free flowing. Combined with the outstanding scenic quality surrounding the river, the Snow River offers a wild and remote river opportunity.

**Alternatives**

Alternative B: Recommendation of the entire 23.8 miles as Recreational.

Alternative C: Recommendation of the entire 23.8 miles as Scenic.

Alternatives D, E and F: Recommendation of the entire 23.8 miles as Wild.

Preferred Alternative: Recommendation of 18.7 miles as Wild (from the gorge upstream to the headwaters) and 5.1 miles as Scenic (from the gorge downstream to the Alaska Railroad bridge).

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** This river (above the railroad bridge) exhibits outstandingly remarkable scenic values when compared to other rivers within the Kenai Peninsula geographic area. It flows through all three of the ecological Provinces found on the Kenai Peninsula.

Snow River also possesses a rare and exemplary hydrologic feature, described below, adding to the wild and outstandingly remarkable values of this river.

Snow River displays a remarkable hydrologic characteristic known as a glacial outburst floods or "jokulhlaups." These Snow River floods occur on the average every three years, varying in interval from 2 to 4 years. Glacial outburst floods occur when a glacially dammed lake, located in a side valley some five miles up the Snow Glacier, spills out underneath the glacier. The lake is approximately two miles long by a half-mile wide, and when full reaches 300 to 500 feet in

depth. Spilling of the lake initiates when the water depth of the lake reaches about 90 percent of the height of the glacial dam. At this point the lake water lifts (floats) the glacial dam, and water begins to escape underneath. A narrow tunnel some five miles long forms between the lake and the terminus of the glacier (headwaters of Snow River.) This tunnel forms in the ice at the base of the glacier. Lake waters begin spilling out the tunnel. Once flow is initiated, the tunnel increases in size due to the heat friction of flowing water against ice. Flood flows down Snow River escalate as the tunnel size increases. When the lake finishes emptying, the tunnel has reached its maximum size, generally around 10 to 12 feet in diameter. Emptying of the lake usually takes one to two weeks, with maximum flood flows to the Snow River occurring near the end of the period. Stream flows on Snow River then usually return to normal levels. Shortly after the lake has emptied, the tunnel is either partially or entirely crushed under the weight of the glacier, and the glacially dammed lake begins to fill once again.

Glacial outburst floods on Snow River are of note for both their size and regularity. The largest outburst events recorded on Snow River are about twice the size of the largest "normal" floods. These outburst floods are occasionally of sufficient size to cause major flooding hazards down the Kenai River below Kenai Lake. Recorded glacial outburst floods on Snow River over the last 50 years have always occurred in the period between mid-August and mid-December, and always at 2-, 3-, or 4-year intervals. The size of the floods appears to depend in part on the thickness of the glacial dam and the depth of the lake at the time the outburst.

Channel features on Snow River have formed in response to outburst flooding events. These floods carry not only high volumes of water, but also very large sediment loads, and some glacial and river ice. Snow River displays large bands of scoured flood plain with numerous braided channels, many of which carry little or no water except during flooding.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership are located along the Seward Highway below the eligible section of Snow River on federal land. The lands were selected by the state and have been conveyed.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans near the eligible section of Snow River that would be curtailed by designation. However, the opportunity to access the Snow River drainage by road has been discussed (personal communication, Sam Grimes). In the Revised Forest Plan this area is to be managed to emphasize a variety of recreational opportunities for backcountry activities in natural appearing landscapes. Designation as a Wild

River would have little effect on known future road construction plans in the area. If designated, any future road construction would have to be located outside the river corridor. Some road construction could occur in the lower section of the river recommended for a scenic classification.

*Water Resources:* Designation as a Wild River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Most state lands in this area are open to timber harvest. Designation as a Wild River would restrict future timber harvest within the river corridor. There are 40 acres of land that are tentatively suitable for timber harvest. Timber harvest on lands within and adjacent to the river corridor would likely be visible from the river corridor. Outstandingly remarkable scenic values could be adversely affected in Alternatives A, B and No Action with potential scheduled timber harvest in the drainage. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* In the Revised Forest Plan modifications to the vegetation as well as fish and wildlife habitat improvements may be allowed but should be designed to blend into the area's natural features. Designation of the river would help protect fisheries and wildlife values but would restrict the construction of some instream fish habitat enhancement structures.

*Recreation, Scenery:* In the Revised Forest Plan this area is to be managed to emphasize a variety of recreational opportunities for backcountry activities in natural appearing landscapes. Designation as a Wild River would help to protect the recreation and outstandingly remarkable scenery values of the area. Some increase in recreation use may occur and requests by commercial outfitters and guides for use of the river corridor may increase but river resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic values could be adversely affected if the river were not designated as a Wild and Scenic River. Timber harvest within the river corridor is not likely because there are only 40 acres that are tentatively suitable for harvest. Potential timber harvest adjacent to the river corridor in Alternatives A, B and No Action would likely be visible from the river corridor.



**Suitability Factor #4: Public, state and local governmental interests.** As per the Kenai Area Plan, management intent for state owned lands located along the Seward Highway below the eligible section of Snow River on federal land (Units 371 and 377) is to manage as multiple use land to allow a variety of uses and to protect existing resource values. Designation of the portion of the river on federal land, as a Wild River would probably not affect state management intent in the vicinity. Some activities that could be permitted on state multiple use land would not be allowed in a designated Wild section of the river.

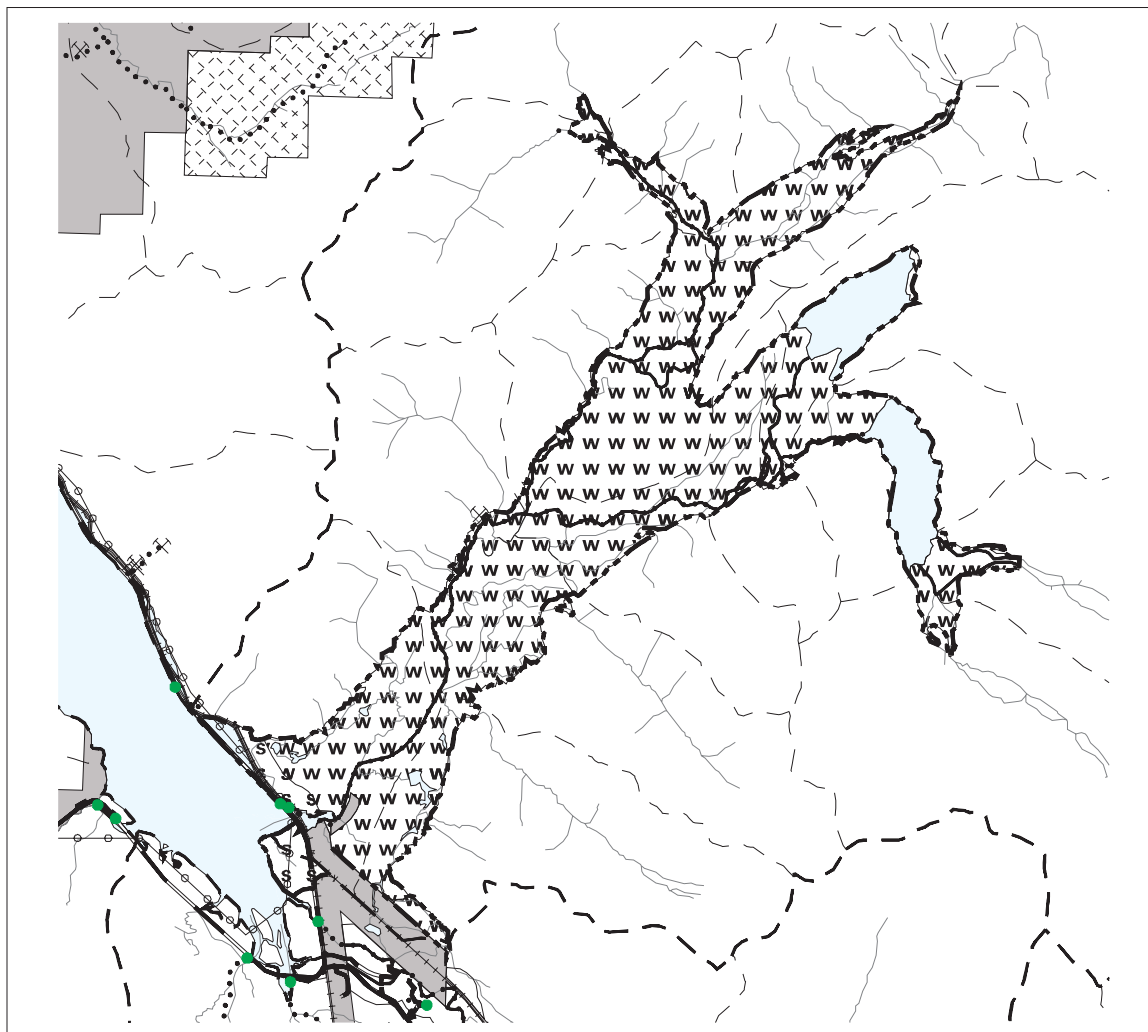
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$21,500</b>

#### **Suitability and Nonsuitability Determinations:**

Public comments received both during the scoping period and on the Draft Environmental Impact Statement and the Proposed Revised Forest Plan were primarily supportive of recommending Snow River for designation. It was recommended for designation in all alternatives except for Alternatives A, B and the No Action Alternative. Alternative A had a theme of recommending no congressional designations. This designation would conflict with the management goals of Alternative B, and the No Action Alternative did not consider Wild and Scenic River designations. The Preferred Alternative recommended designation of the lower 5.1 miles of the Snow River as Scenic and the upper 18.7 miles as Wild. Classification of the lower section of the river as Scenic is consistent with the active management theme envisioned for the Kenai Peninsula. This would allow for some future increase in motorized recreational use and potential facilities development in the lower section as necessary. Because the upper section is so remote it was recommended for a Wild designation to protect its wild character.

# Wild and Scenic Rivers Eligibility Study TWENTYMILE RIVER VALLEY COMPLEX Chugach National Forest



0mi 1mi 2mi 3mi 4mi 5mi 6mi 7mi  
LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Twentymile River (complex)</b>
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**Description**

This wetlands complex is located within the Alaska Mixed Forest Province. The eligible river segment is 14.2 miles long. The complex includes the entire valley bottom.

The broad valley bottom of Twentymile River defines a large, remarkably diverse and dynamic wetlands complex, second only to the Copper River Delta on the Chugach National Forest. This valley bottom unit is of further geomorphic note in that it represents a former fiord that was exposed from a receding glacier about 11,000 to 14,000 years ago. The fiord, extending some 10 to 12 miles up the existing valley, has filled with hundreds of feet of fine-grained glacio-marine sediments. Subsequent, smaller-scale glacial pulses have advanced and retreated within the upper valley bottom. The valley bottom has been covered with a veneer of glacial alluvial sediments carried by Twentymile River and its tributaries. The poorly drained, fine-grained marine and estuarine sediments provide the surface on which much of the valley wetland has developed. Both tidal and river flooding continue to deposit fine-grained sediments within the valley.

Changes within the recent geologic history of the valley include not only a major recession of the glaciers formerly occupying the valley, but also rising sea level (some 300 feet) accompanying the glacial retreat, and periodic and catastrophic down drop of the region during major seismic events. During the most recent major earthquake, March 27, 1964, the entire Twentymile watershed dropped some 6 to 7 feet.

The wetlands and valley bottom complex within the Twentymile Valley produce outstanding habitat for numerous fish and wildlife species including: three salmon species (sockeye, coho, and chinook), hooligan, beaver, numerous waterfowl, and moose. The valley bottom complex defines some 20 square miles of varied wetland, lake, and riverine habitat. A combination of the available fish and wildlife resources, the spectacular scenery, and the remote character of Twentymile Valley attract recreationists to the valley. No developed transportation routes exist within the valley except the Seward Highway and the Alaska Railroad which both cross the valley at its mouth. Access up the valley includes: power craft (motor boats, jet boats, air boats, and hovercraft), paddle craft (canoe, kayak, row boats), float planes, and hiking in the summer; and snowmachines, dog sleds, skis, snowshoes, and ski planes in the winter. The river and its associated tributaries and lakes provide the major travel route for most of these forms of transportation.

Powerboats are known to ascend Twentymile River up to where its east and west branches fork, and up Glacier River to Carmen Lake, and nearly to Twentymile Lake. Snowmachines and skiers also access this entire area. Float planes and ski planes land on both Carmen and Twentymile Lakes.

Twentymile Glacier has receded three miles over the last 200 years. A basin developed underneath the glacier started to appear around 1930. This basin, Twentymile Lake, has grown to nearly two miles in length as the glacier has continued to recede. The glacier will probably move out of the lake basin completely within the next several years. At present, large amounts of ice from the Twentymile Glacier calve into the lake, leaving it studded with spectacular icebergs. Great quantities of rock debris formerly contributed to Glacier River by the Twentymile Glacier now drop directly into Twentymile Lake. The channel of Glacier River was formerly building up over time (aggrading) with glacial sediments. Now, with the limited sediment load, the channel is beginning to stabilize and incise into the valley bottom. This is occurring over the full five-mile length of Glacier River. This stabilizing channel condition will likely create steadily improving fisheries habitat on Glacier Creek in the decades to come.

Carmen Lake formed during the damming of the Carmen River Valley by outwash sediments from the Twentymile Glacier. Development of this outwash dam likely occurred within the last 150 years. Carmen Lake is relatively shallow and likely shrinking in size and depth as Carmen River erodes its outlet. Groundwater springs along Carmen River below Carmen Lake allow for ice-free channel conditions on Carmen River throughout the winter. Ice-free conditions extend for an additional two to three miles down Glacier River. This ice-free character improves over-winter rearing habitat for coho and king salmon, and also attracts some overwintering waterfowl, minks and river otters.

### **Eligibility**

The outstandingly remarkable values associated with the Twentymile River (complex) are the synergistic effects of the wetland, lake, and river complex within the Twentymile Valley.

### **Classification**

Wild River. The Twentymile drainage is generally inaccessible by road or trail. The only access to the drainage is by airboat, floatplane, ski plane, or snowmachine. Cross-country skiers can also access the area. This watershed complex and its shorelines are largely primitive.

### **Alternatives**

Alternatives E and F: Recommendation of the entire 14.2 miles as Wild.

Preferred Alternative: Recommendation of the entire 14.2 miles as Scenic.

### **Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The wetland, lake, and river complex within the Twentymile Valley bottom is the chief outstandingly remarkable feature to be considered in designation and protection. This valley bottom complex provides the majority of the outstanding fish and wildlife habitat and associated recreation activity within the Twentymile watershed. Forested sideslopes in Twentymile Valley rise steeply from the valley bottom. These sideslopes are sharply demarcated from the valley bottom by both slope and vegetation. Although habitat and recreation values associated with these sideslopes lack the

remarkable values found within the valley bottom, the sideslopes affect the valley bottom both from tributary water flow and high visibility from the valley bottom. In the event of Wild River designation for Twentymile River, management activities on these sideslopes should be developed with special consideration of the remote character of the valley and its high value wetlands.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership are located at the mouth Twentymile River and are owned by the Alaska Railroad.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans within the eligible river complex area of Twentymile River that would be curtailed by designation. Designation as a Wild River would have little effect on known future road construction plans in the area.

*Water Resources:* Designation as a Wild River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Lands in this area are open to timber scheduled harvest in Alternatives A, B and No Action. Designation as a Wild River would restrict future timber harvest except for that which could be done without road building. Some timber harvest could occur with appropriate mitigation of effects within the river corridor. There are only 70 acres of land that are tentatively suitable for timber harvest within the river corridor. These lands could be considered for scheduled harvest in Alternatives A, B and No Action. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* In the Revised Forest Plan, modifications to the vegetation as well as fish and wildlife habitat improvements may be allowed, but should be designed to blend into the area's natural features. Designation of the river would help protect wetlands habitat values and fisheries values but would restrict the construction of some instream fish habitat enhancement structures.

*Recreation, Scenery:* In the Revised Forest Plan this area is to be managed to emphasize a variety of recreational opportunities for backcountry activities in natural appearing landscapes. Designation as a Wild or Scenic River would help to protect the resource values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase but river resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic values could be adversely affected if the river were not designated as a Wild or Scenic River. Timber harvest within the river corridor is not likely because there are only 70 acres that are tentatively suitable for harvest. Potential timber harvest adjacent to the river corridor in Alternatives A, B and No Action would likely be visible from the river corridor.

**Suitability Factor #4: Public, state and local governmental interests.** As per the Turnagain Arm Management Plan for State Lands, management intent for state owned lands within the planning area is outlined in management direction for stream corridors. Goals for stream corridors are:

Provide opportunities for a variety of recreational activities within stream corridors, including:

- wilderness and developed recreational activities;
- protection of riparian fish and wildlife habitats; and,
- protection of water quality to support domestic uses, fish and wildlife production, and recreational activities.

State management guidelines suggest that these goals are to be met by establishing buffers along streams. Water-dependent structures, such as docks and boathouses, may be allowed within publicly owned buffers. If a structure would block public access, the Division of Land will require an applicant to provide alternate access. Commercial or industrial uses and activities that are neither water-dependent nor water-related may be considered on a case-by-case basis provided that the applicant can demonstrate public need and lack of suitable alternatives. If, because of topography or adjacent land ownership, it is not practical to maintain a buffer adjacent to fish habitat, public water supplies, or recreational waters, other measures will be used to mitigate the impacts. Any activity that would alter natural hydrologic conditions or cause soil erosion shall be minimized. Designation of the river as a Wild or Scenic River would probably not affect state management intent in the vicinity.

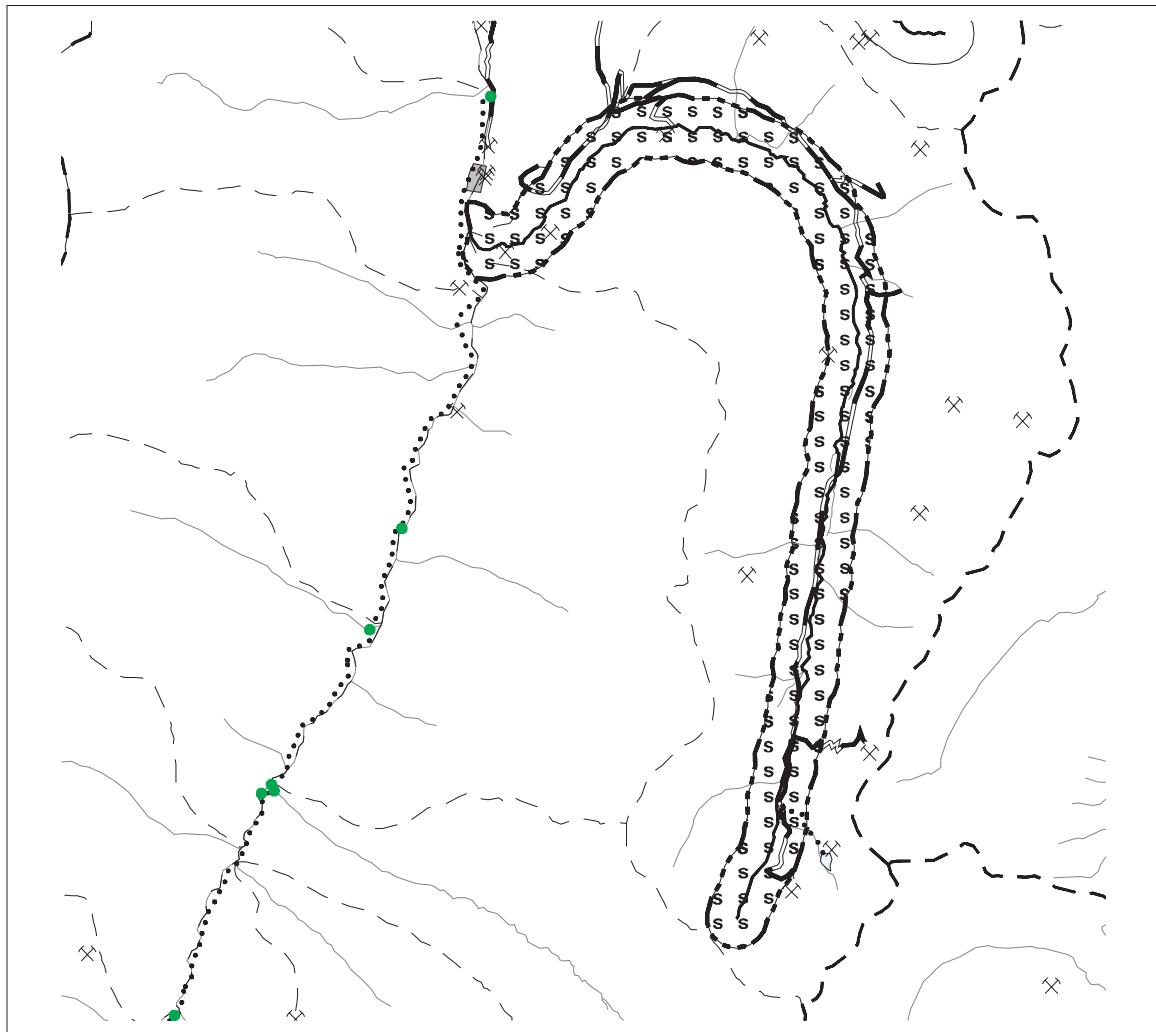
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$21,500</b>

**Suitability and Nonsuitability Determinations:**

Twentymile River Complex is recommended for Wild or Scenic River designation in the Revised Forest Plan and Alternatives E and F. Most of the conflict associated with the management of this area was related to recreational motorized and nonmotorized use. A Scenic River recommendation provided for motorized options and fit well with the theme of the Revised Forest Plan for this area. Public comments received both during the scoping period and on the Draft Environmental Impact Statement and the Proposed Revised Forest Plan were primarily supportive of recommending Twentymile River for Scenic classification. It would allow some development of recreation facilities and new trails to accommodate river users. Designation of this river is consistent with the active management theme envisioned for the Kenai Peninsula. Designation of the river would not foreclose options for the Alaska Railroad to manage their lands located at the mouth of the river. Classification of the river as Scenic would allow motorized activity to continue at current levels and allow for some future expansion of use.

# Wild and Scenic Rivers Eligibility Study PALMER CREEK Chugach National Forest



0mi 1mi 2mi 3mi 4mi 5mi

## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001



<b>Palmer Creek</b>
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**Description**

Palmer Creek is located within the Alaska Mixed Forest Province. The eligible river segment is 10.9 miles long.

When one enters Palmer Creek Valley, the presence of Palmer Creek is immediately noticed. The sound of rushing water is heard throughout the valley. Its presence dominates the valley.

Beginning as a small creek tumbling from the mountains, the clear waters of Palmer Creek quickly settle into the bottom of the valley. The upper section of the river passes through open alpine meadows and alder patches. As the river heads downstream, trees begin to line the banks, creating a strong sense of enclosure. Breaks in the trees provide contrasting views of the surrounding alpine covered mountains.

Just before Palmer Creek joins Resurrection Creek, the valley narrows into a steep V-notched canyon, ending in a waterfall, contrasting with the typical U-shaped valley of the rest of the creek.

**Eligibility**

The outstandingly remarkable values associated with Palmer Creek are scenery and visual features.

**Classification**

Scenic River. Forest road #106 runs parallel to Palmer Creek, crosses it in two places, and is road accessible in three or four spots. The road is generally located outside of the stream canyon and its shorelines are largely undeveloped.

**Alternatives**

Alternative C: Recommendation of the entire 10.9 miles as Recreational.

Alternatives D, E, and F: Recommendation as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** From the head of Palmer Valley and flowing for 10.9 miles to join Resurrection Creek, Palmer Creek is integral to the outstanding scenic quality of Palmer Creek Valley. The creek combined with the vegetation pattern and strong U-shaped valley creates one of the most scenic road accessible places on the Forest.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** There are no lands in other ownership adjacent to the river corridor of Palmer Creek.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* Road construction within the Palmer Creek drainage may occur, however, only an average of one mile per year is projected in the Revised Forest Plan. With appropriate planning and mitigation this road construction would not be curtailed by designation as a Scenic or Recreational River.

*Water Resources:* Designation as a Scenic River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in the planning area are open to mineral entry. Designation as a Scenic or Recreational River would allow for future minerals development work, with appropriate mitigation of effects, within the river corridor.

*Timber:* Most state lands in the planning area are open to timber harvest scheduling. Lands in this area are open to scheduled timber harvest in Alternatives A, B and No Action. Designation as a Scenic River would allow for future scheduled timber harvest with appropriate mitigation of effects within the river corridor. There are 140 acres of land that are tentatively suitable for timber harvest within the river corridor. These lands and others adjacent to the corridor could be scheduled for harvest in Alternatives A, B and No Action. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* In the Revised Forest Plan modifications to the vegetation as well as fish and wildlife habitat improvements may be allowed but should be designed to blend into the area's natural features. Designation of the river would help protect fisheries values but would restrict the construction of some instream fish habitat enhancement structures.

*Recreation, Scenery:* In the Revised Forest Plan this area is to be managed to emphasize a variety of recreational opportunities for backcountry activities in natural appearing landscapes. Designation as a Scenic or Recreational River would help to protect the recreation and the outstandingly remarkable scenery values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase but river resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic values could be adversely affected if the river were not designated as a Scenic or Recreational River. There are 140 acres of land within the river corridor that are tentatively suitable for timber harvest. Potential timber harvest adjacent to the river corridor in Alternatives A, B and No Action would likely be visible from the river corridor.

**Suitability Factor #4: Public, state and local governmental interests.** Designation of the river as a Scenic or Recreational River would probably not affect state or local management intent in the vicinity.

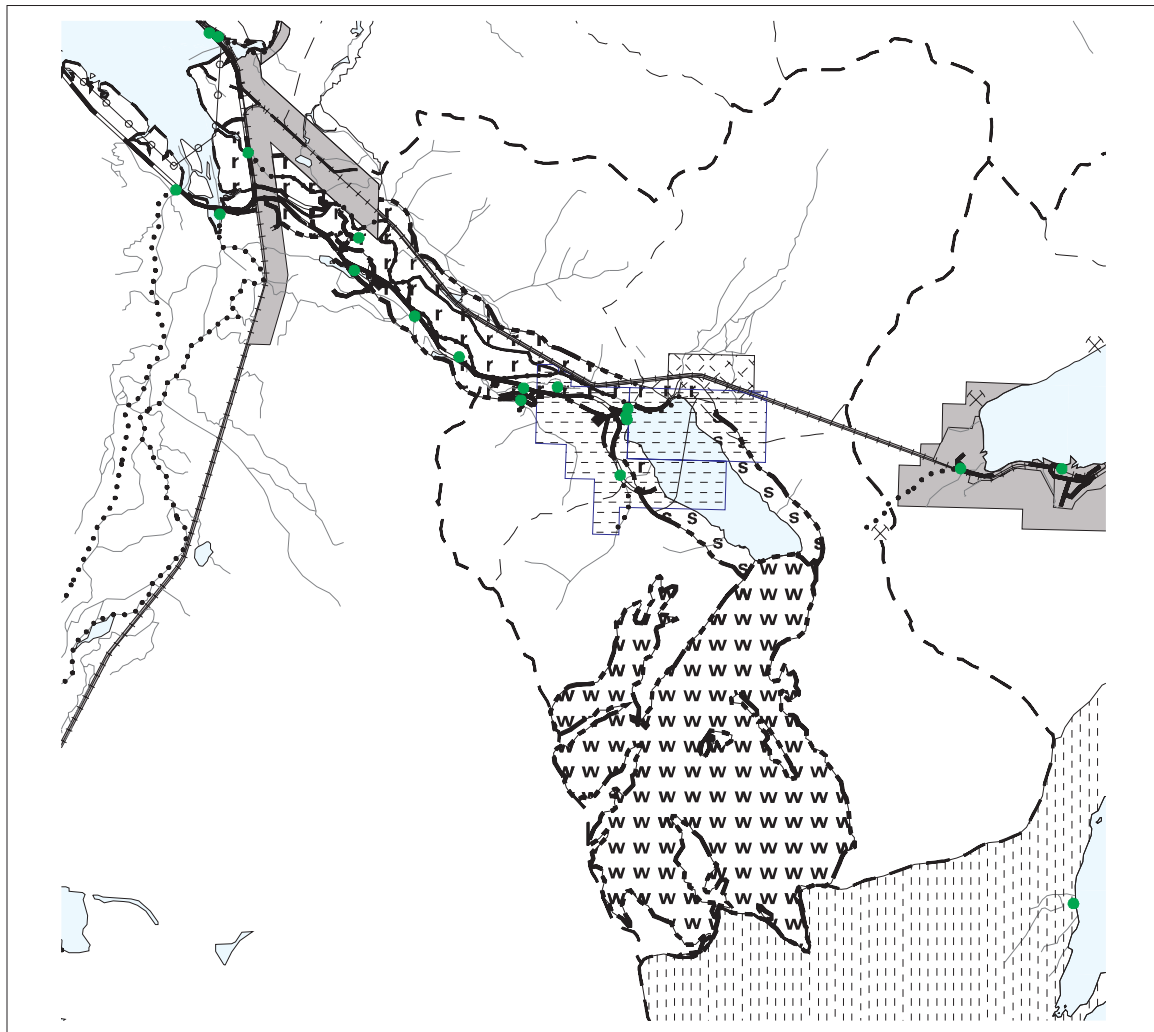
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$21,500</b>

#### **Suitability and Nonsuitability Determinations:**

Palmer Creek is not recommended for designation because there were relatively few comments expressing support for designation. Its outstandingly remarkable values, water quality and free-flow would likely be protected with the application of the Fish and Wildlife Conservation Management Area prescription. It is recommended for designation in Alternatives C, D, E, and F because the designation fits the theme and management intent for this area in these alternatives.

# Wild and Scenic Rivers Eligibility Study PORTAGE VALLEY Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Portage Creek</b>
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**Description**

Portage Creek is located in the Pacific Coastal Mountains Forest-Meadow Province. The eligible river segment is 6.2 miles long.

Portage Creek is a braided glacial stream that flows approximately six miles from Portage Lake and exits Chugach National Forest lands below the bridge across the Seward Highway.

**Eligibility**

The outstandingly remarkable values associated with Portage Creek are scenery and visual features and recreational values.

**Classification**

Recreational River. The Alaska Railroad parallels Portage Creek on the north side. Of the approximately 5.5 miles of Portage Creek between Portage Lake and the bridge where the Seward Highway crosses Portage Creek, approximately four miles of the creek are paralleled by the railroad near water's edge. Additional activity associated with the railroad that affected Portage Creek is rip-rapping of the stream bank and gravel excavation along approximately one mile of the creek. Both the highway and the railroad are within 1/2 to 1/4 mile of the outside channels of Portage Creek.

On the south side of Portage Creek is Forest Highway 35 that runs to the Begich, Boggs Visitor Center. The visitor center is located near the beginning of Portage Creek. There are approximately six improved and unimproved access points between Portage Lake and the Seward Highway which provide for access for float trips on the creek and day use picnic and fishing access. The day-use type areas include the Williwaw ponds, Tangle ponds and Willow ponds. These consist of unimproved dirt roads, and parking in the gravel areas for picnicking, hiking and fishing. In addition, an electric power transmission line parallels Portage Creek, however it is not readily apparent from the creek.

**Alternatives**

Alternatives E, F, and the Preferred Alternative: Recommendation of the entire 6.2 miles as Recreational.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Portage Valley is the number one tourist attraction in the State of Alaska. Portage Valley is approximately two miles wide and comprises a highly scenic corridor with open vistas of rugged and steep narrow side valleys. Because it is a relatively narrow valley the scenic views are even more dramatic because they are close up.

Portage Creek provides excellent day use float trips for people in canoes and rafts. People typically enter Portage Creek at a small undeveloped site downstream a few hundred feet from the Begich, Boggs Visitor Center and float to the bridge crossing at the Seward Highway. The river is popular because it is

accessible and has a low difficulty rating (Class II) for floating, however, it can be dangerous because of "sweepers." Because of the blue-green color of the water resulting from glacial sediment, fishing is generally limited to clear side streams and several ponds in the valley. Additional day use activity for picnicking, fishing, hiking, wildlife viewing and sightseeing takes place at approximately six unimproved sites between Portage Lake and Seward Highway. As mentioned above, Portage Valley is a major recreation/tourism area that is readily accessible to the Anchorage area.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** All lands adjacent to the river corridor of Portage Creek are National Forest System lands.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans within the eligible river corridor area that would be curtailed by designation. The Alaska Department of Transportation and Public Facilities has recently upgraded the second tunnel between Whittier and Portage to accommodate automobiles. Designation would have no effect on any other future known road construction plans in area.

*Water Resources:* Designation would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Recreational River would allow new mining claims within the river corridor but some mitigation to protect river values may be required.

*Timber:* Lands in this area are open to scheduled timber harvest in Alternatives A, B and No Action. Other alternatives do not have a scheduled timber harvest program. Designation as a Recreational River would allow some timber harvest activities with some mitigation requirements to protect river values. There are only 10 acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* In the Revised Forest Plan this area would be managed to provide a variety of habitats for fish and wildlife species. Designation of the River corridor area would not affect fish and wildlife habitat values or enhancement opportunities.

*Recreation, Scenery:* In the Revised Forest Plan this area would be managed to provide year-round recreational opportunities in both developed and dispersed recreation settings. Designation as a Recreational River would help to protect the outstandingly remarkable resource values of the area. Some increase in

recreation use would be likely, and requests by commercial outfitters and guides for use of the Portage area may increase but the Portage Creek's related resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic and recreational values could be adversely affected if Portage Creek were not designated as a Recreational River. Timber harvest within the river corridor is not likely because there are only 10 acres that are tentatively suitable for harvest. Potential timber harvest adjacent to the river corridor in Alternatives A, B and No Action would likely be visible from the river corridor. Designation as a Recreational River would require mitigations to protect Portage Creek resource values. These mitigations would not be required if the Lake were not designated. The Preferred Alternative does not recommend designation of Portage Lake.

**Suitability Factor #4: Public, state and local governmental interests.** As per the Turnagain Arm Management Plan, management intent for state owned lands within the planning area is outlined in management direction for stream corridors. The Portage area is located within Management Unit 5 East Turnagain Arm. Subunit 5e is a 320-acre state selection in Bear Valley near Portage Lake. This parcel straddles the Alaska Railroad, between the two tunnels to Whittier. The state selected land in Bear Valley because of the strategic location between the Seward Highway Corridor and Whittier. The selection includes some of the only developable land between Portage and Whittier. The parcel was selected for community expansion and recreation purposes, either to aid in improving access to Whittier, or to provide additional land to accommodate future growth as a result of improved access to Whittier.

Goals for stream corridors in Management Unit 5 are to:

- provide opportunities for a variety of recreational activities within stream corridors, including wilderness and developed recreational activities;
- protect riparian fish and wildlife habitats; and,
- protect water quality to support domestic uses, fish and wildlife production, and recreational activities.

State management guidelines suggest that these goals are to be met by establishing buffers along streams. Water-dependent structures, such as docks and boathouses, may be allowed within publicly owned buffers. If a structure would block public access, the Division of Land will require an applicant to provide alternate access. Commercial or industrial uses and activities that are neither water-dependent nor water-related may be considered on a case-by-case basis provided that the applicant can demonstrate public need and lack of

suitable alternatives. If, because of topography or adjacent land ownership, it is not practical to maintain a buffer adjacent to fish habitat, public water supplies, or recreational waters, other measures will be used to mitigate the impacts. Any activity that would alter natural hydrologic conditions or cause soil erosion shall be minimized.

Designation of the Portage Creek would probably not affect state management intent in the vicinity.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired and no significant recreation facilities would be developed. The following are expected additional funding needs if the river were designated.

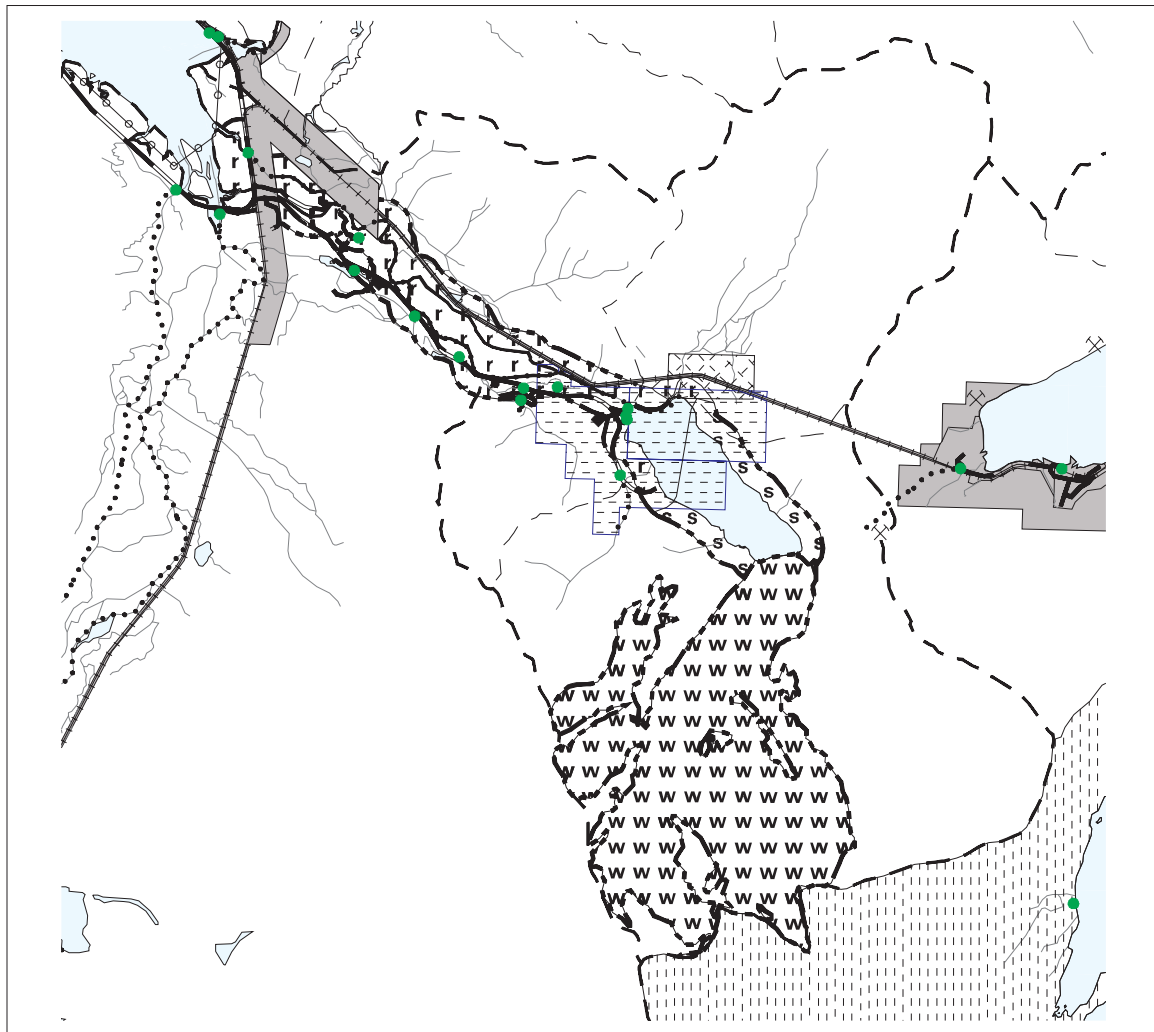
General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

The Revised Forest Plan recommends Portage Creek for designation because it is one of the most popular recreation areas on the Chugach National Forest and designation as a Recreational River would fit well with the management goals of this area and the theme of the Preferred Alternative. Public comments received both during the scoping period and on the Draft Environmental Impact Statement and the Proposed Revised Forest Plan were primarily supportive of recommending Portage Creek for scenic classification. Designation of Portage Creek as a Recreational River would not impact future management of winter and summer motorized and nonmotorized recreational activities in the vicinity. It would allow some development of recreation facilities and new trails to accommodate river users. Designation Portage Creek is consistent with the active management theme envisioned for the Kenai Peninsula and consistent with the level and intensity of public use that occurs in Portage Valley. Designation of the creek would not foreclose options for the Alaska Railroad to manage their lands located at the mouth of the river. It is also recommended for designation in Alternatives E and F because the themes of these alternatives generally support all congressional designations. Alternatives A, B, C, D, and the Not Action Alternative did not recommend Portage Creek for designation because other management area prescriptions used in these alternatives would protect recreational values.



# Wild and Scenic Rivers Eligibility Study PORTAGE VALLEY Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Portage Lake</b>
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**Description**

Portage Lake is located within the Pacific Coastal Mountains Forest-Meadow Province. The eligible river segment is 2.3 miles long.

Portage Lake is within a highly scenic corridor with open vistas of rugged mountains containing numerous hanging glaciers, waterfalls, steep slopes, steep narrow side valleys, alpine meadows and rock faces. Because it is a relatively narrow valley the scenic views are even more dramatic because they are close up. Day use activity for picnicking, fishing, hiking, wildlife viewing and sightseeing takes place at several unimproved sites.

**Eligibility**

The outstandingly remarkable values associated with Portage Lake are scenery and visual features and recreational values.

**Classification**

Scenic River. Portage Lake is accessible by Forest Highway 35 in two places. The railroad accesses the drainage but is located about 1/4 mile away from the lake. The Begich, Boggs Visitor Center and associated parking lots and public and private facilities are a major public interpretive and viewing center located near the lake outlet. The recently constructed road to Whittier is located on the northwest shore of the lake.

**Alternatives**

Alternatives E and F: Recommendation of 0.8 miles near the visitor center as Recreational. Recommendation of the remaining 1.5 miles of Portage Lake as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The Begich, Boggs Visitor Center is located on the shore of Portage Lake and is a major visitor center and attracts nearly a half million people per year. Associated facilities include parking lots, cement walkways, public rest rooms, a concessionaire facility and a tour boat and docking facility. This is the highlight attraction for many visitor tour trips to Alaska. Portage Lake is readily accessible to the people of Anchorage.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** All lands adjacent to Portage Lake are National Forest System lands. A 320-acre parcel about 1/2 mile north of the lake, in Bear Valley has been selected by the State of Alaska and serves as the staging area for the Whittier tunnel.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans within the eligible lake corridor area that would be curtailed by designation. Designation would have no effect on any known road construction plans in the area.

*Water Resources:* Designation would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Scenic or Recreational River would allow new mining claims within the river corridor but some mitigations to protect river values may be required.

*Timber:* Designation as a Scenic or Recreational River would allow some timber harvest activities with some mitigation requirements to protect river values. There are no acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* In the Revised Forest Plan this area would be managed to provide a variety of habitats for fish and wildlife species. Designation of the Lake corridor area would not affect fish and wildlife habitat values or enhancement opportunities.

*Recreation, Scenery:* In the Revised Forest Plan this area would be managed to provide year-round recreational opportunities in both developed and dispersed recreation settings. Designation as a Scenic or Recreational River would help to protect the outstandingly remarkable resource values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the Portage Lake area may increase but the Lake-related resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Timber harvest within the river corridor is not likely because there are no acres that are tentatively suitable for harvest. Mitigation measures are in place to protect the Lake's resource values.

**Suitability Factor #4: Public, state and local governmental interests.** As per the Turnagain Arm Management Plan for State Lands, management intent for state owned lands within the planning area is outlined in management direction for stream corridors.

The Portage area is located within Management Unit 5 East Turnagain Arm. Subunit 5e is a 320-acre state selection in Bear Valley near Portage Lake. This parcel straddles the Alaska Railroad, between the two tunnels to Whittier. The selection includes some of the only developable land between Portage and Whittier. The parcel was selected for community expansion and recreation purposes, either to aid in improving access to Whittier, or to provide additional land to accommodate future growth as a result of improved access to Whittier.

Goals for stream corridors in Management Unit 5 are to:

- provide opportunities for a variety of recreational activities within stream corridors, including wilderness and developed recreational activities;
- protect riparian fish and wildlife habitats; and,
- protect water quality to support domestic uses, fish and wildlife production, and recreational activities.

State management guidelines suggest that these goals are to be met by establishing buffers along streams. Water-dependent structures, such as docks and boathouses, may be allowed within publicly owned buffers. If a structure would block public access, the Division of Land will require an applicant to provide alternate access. Commercial or industrial uses and activities that are neither water-dependent nor water-related may be considered on a case-by-case basis provided that the applicant can demonstrate public need and lack of suitable alternatives. If, because of topography or adjacent land ownership, it is not practical to maintain a buffer adjacent to fish habitat, public water supplies, or recreational waters, other measures will be used to mitigate the impacts. Any activity that would alter natural hydrologic conditions or cause soil erosion shall be minimized. Designation of the Lake would probably not affect state management intent in the vicinity.

The Portage Lake Recreation Area (Portage Lake/Bear Valley PLO 1649) is withdrawn from all forms of appropriation under the public-land laws, including the mining but not the mineral leasing laws, nor the act of July 31, 1947 (61 stat. 681; 30 U.S.C. 601-604) as amended, and reserved under jurisdiction of the USDA Forest Service, as a recreation area.

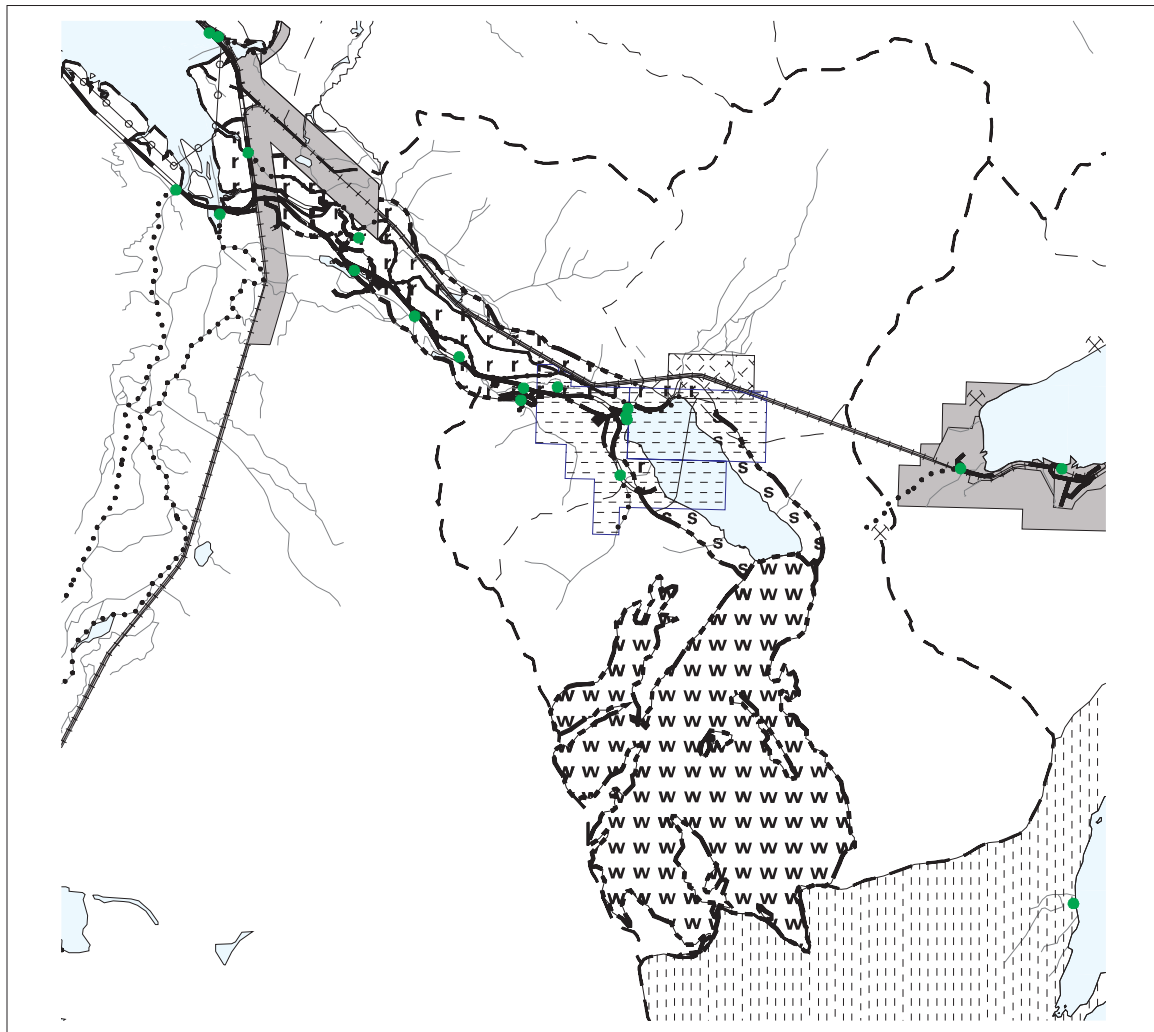
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired. Increased lake use could require construction of a boat launch ramp. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	30,000
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$45,000</b>

**Suitability and Nonsuitability Determinations:**

Portage Lake is not recommended because there were relatively few comments on Portage Lake expressing support for designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the Backcountry Management Area prescription. Operators under special use permit provide commercial tours on Portage Lake. Portage Lake is recommended for designation in Alternatives E and F because the theme of those alternatives is supportive of nearly all congressional designations.

# Wild and Scenic Rivers Eligibility Study PORTAGE VALLEY Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Portage Glacier</b>
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**Description**

Portage Glacier is located within the Pacific Coastal Mountains Forest-Meadow Province. The eligible segment is 4.7 miles long.

Portage Glacier is within a highly scenic corridor with open vistas of rugged mountains containing numerous hanging glaciers, waterfalls, steep slopes, steep narrow side valleys, alpine meadows and rock faces. Because it is a relatively narrow valley the scenic views are even more dramatic because they are close up. Day use activity for picnicking, fishing, hiking, wildlife viewing and sightseeing takes place at several unimproved sites.

**Eligibility**

The outstandingly remarkable values associated with Portage Glacier are scenery, visual features and recreational values.

**Classification**

Wild River. Portage Glacier is not road accessible.

**Alternatives**

Alternatives E and F: Recommendation of the entire 4.7 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The Begich, Boggs Visitor Center is located on the shore of Portage Lake, about 3 miles from Portage Glacier, and is a major visitor center and attracts nearly a half million people per year. Associated facilities include parking lots, cement walkways, public rest rooms, a concessionaire facility and a tour boat and docking facility. Portage Glacier is the highlight attraction for many visitor tour trips to Alaska.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in the vicinity of Portage Glacier are National Forest System lands.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans within the eligible Glacier area, which would be curtailed by designation. Designation as a Wild River would have no effect on any known road construction plans in the area.

*Water Resources:* Designation as a Wild River would be unlikely to affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Wild River would withdraw the glacier corridor from mineral entry.

*Timber:* Lands in this area are open to scheduled timber harvest in Alternatives A, B and No Action, however, the eligible glacier area includes mostly rock and ice and is not suitable for timber harvest.

*Fisheries and Wildlife:* In the Revised Forest Plan this area would be managed to provide a variety of habitats for fish and wildlife species. Designation of the Glacier would not affect fish and wildlife habitat values or enhancement opportunities.

*Recreation, Scenery:* In the Revised Forest Plan, this area would be managed to provide year-round recreational opportunities in both developed and dispersed recreation settings. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the Glacier area may increase but the Glacier-related resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable scenic and recreational values will not be adversely affected if the Glacier is not designated as a Wild River because recreation opportunities are limited to primitive or semi-primitive opportunities due to the nature of the terrain.

**Suitability Factor #4: Public, state and local governmental interests.** Designation of the river as a Wild River would probably not affect state or local management intent in the vicinity.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the glacier were designated.

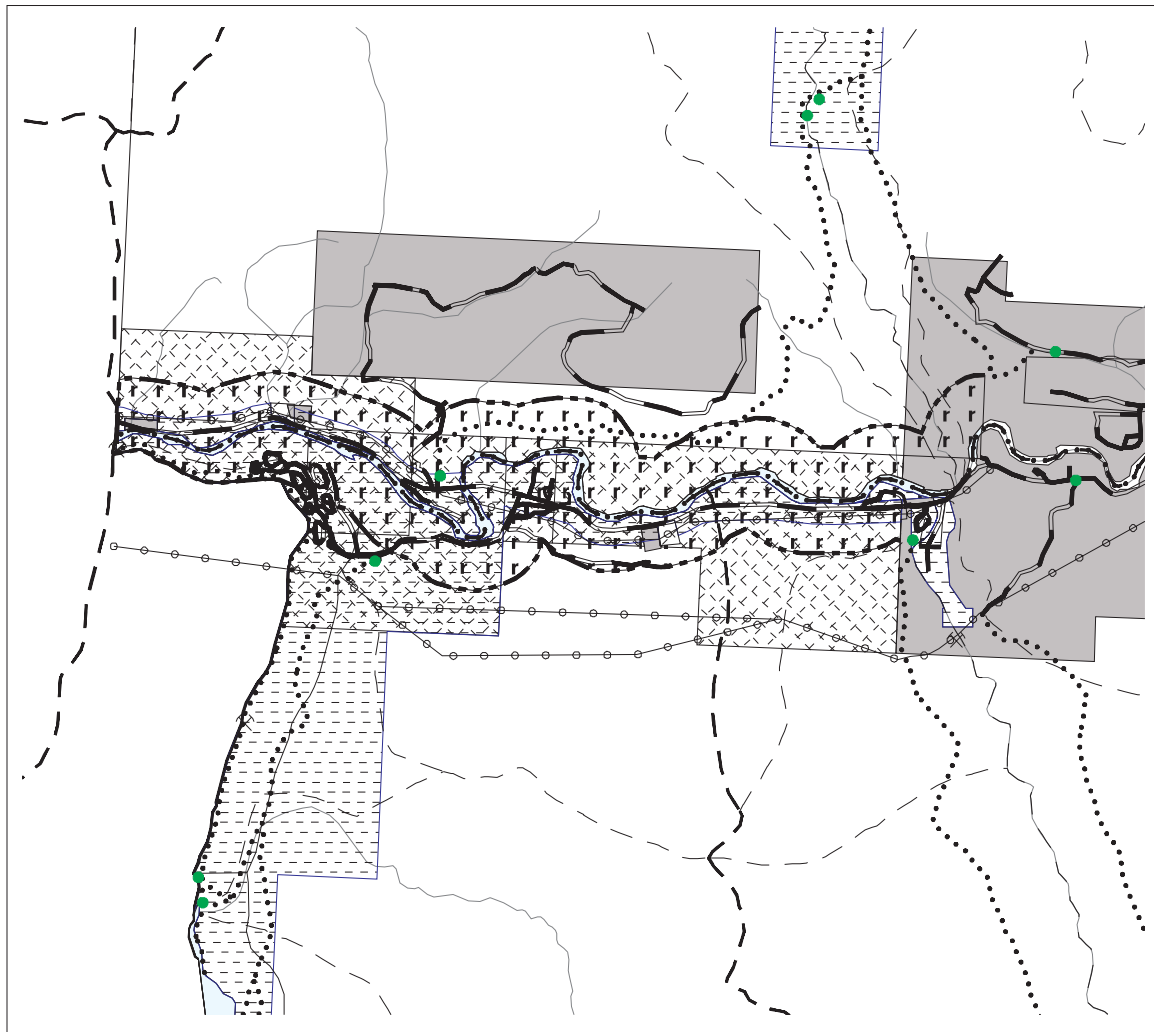
General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>



**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend designation of Portage Glacier. Several comments were received on the concept of recommending that frozen rivers (glaciers) not be added to the National Wild and Scenic Rivers System. Many people felt that glaciers should not even be considered as eligible for designation. Others felt that although they may be eligible for designation there is little threat to their outstandingly remarkable values and thus do not need to be designated. Generally, there was little public support for recommending any glaciers for designation. Its outstandingly remarkable values, water quality and free flow would be protected with the application of the Backcountry Management Area prescription. Portage Glacier is recommended for designation in Alternatives E and F because the theme of those alternatives is supportive of nearly all congressional designations.

# Wild and Scenic Rivers Eligibility Study KENAI RIVER Chugach National Forest



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## LEGEND

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|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Kenai River</b>
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**Description**

The Kenai River is located within the Alaska Mixed Forest Province. Most of this river is in other ownership. The Forest Service portion of the Kenai watershed that support the fisheries is very small, with only a few hundred feet of the stream contained on National Forest System lands. The eligible river segment is 5.5 miles long.

**Eligibility**

The outstandingly remarkable value associated with the Kenai River is the fisheries resource value.

**Classification**

Recreation River. The Kenai River is readily accessible in many places by the Sterling Highway and its shorelines have undergone some development. The highway crosses the river in three places.

**Alternatives**

Alternative F: Recommendation of the entire 5.5 miles as Recreational.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Kenai River king salmon are world renowned for their unparalleled size. Numerous seventy and eighty pound fish are caught every year, and a few fish of ninety pounds have been landed. The world record king of 97.4 pounds was caught in 1985. Anglers come from around the world for this remarkable fishing experience.

Two distinct runs characterize Kenai River king salmon. The early run fish generally move up into tributaries of the Kenai to spawn. The second run primarily spawn in the main river, and are the large fish of legends. They appear to have evolved to spawn in the swift deep main current of the Kenai River. These fish spawn primarily below Skilak Lake, although some move up between Skilak and Kenai Lake. The upper portion of the river is closed to king salmon angling to protect spawning fish.

The Kenai River also produces a major rainbow trout fishery. This fishery concentrates between Skilak and Kenai Lakes, and has gained national recognition for its 15- to 20-pound rainbows. The sockeye fishery is also robust. Though primarily a fishery used by anglers from throughout the Southcentral Alaska region, where 60 percent of Alaska's population reside, the sockeye fishery does attract anglers from across the United States and the world, due to its accessibility from Anchorage and its international airport.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** The eligible section of the Kenai River is generally located between the Russian River and Cooper Creek. Lands in ownership in this vicinity include state owned lands (managed by the Division of Lands), state selected lands and borough owned lands.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans within the eligible river corridor area that would be curtailed by designation.

*Water Resources:* Designation would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry. Designation as a Recreational River would allow new mining claims within the river corridor with mitigation to protect river values.

*Timber:* Lands in this area are open to scheduled timber harvest in Alternatives A, B and No Action. Designation as a Recreational River would allow some timber harvest activities with some mitigation requirements to protect river values. There are 40 acres of land within the river corridor that are tentatively suitable for timber harvest. Other alternatives do not have a scheduled timber harvest program.

*Fisheries and Wildlife:* The theme for this area in the Revised Forest Plan is to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed recreation settings. Designation of the River corridor area would not affect fish and wildlife habitat values or enhancement opportunities.

*Recreation, Scenery:* The theme for this area in the Revised Forest Plan is to provide a variety of habitats for fish and wildlife species and year-round recreational opportunities in both developed and dispersed recreation settings. Designation as a Recreational River would help to protect the resource values of the area. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river area may increase but the river-related resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable fisheries values could not be maintained by managing only those river corridors administered by the Forest Service. If a cooperative agreement between most of the land managers adjacent to the river could be developed resulting in designation of most of the river corridor then management activities could be controlled to the extent necessary to maintain the fisheries values. Designation as a Recreational River would require mitigations as related to proposed management activities to protect river fisheries resource values. Non-designation of the National Forest System portion of this river would have little or no effect on the outstandingly remarkable fisheries value of the river.

**Suitability Factor #4: Public, state and local governmental interests.**

Management intent for lands in other ownership in the vicinity of the eligible section of the Kenai River is described in the Kenai Area Plan. Management direction in that Plan is organized by U.S. Geological Survey Quad. The eligible section of the Kenai River is in Seward B-8 and direction for lands in other ownership is described in Units 391, 393A, 393B, 394A, 394B, 395 and 396.

**Unit 391:** Designation - Public Recreation. Goal: Encourage providing access to state land for a wide variety of public uses, such as camping, berry picking, hunting and fishing. Support economic development in tourism by allowing use of state land for commercial recreation leasing. Management is geared toward state and region-wide needs.

**Guidelines:** 1) Protection of eagle nesting trees along the north shore of the Kenai River is a priority. 2) Manage consistent with the Kenai River Comprehensive Management Plan. 3) Facilitate an addition to the Kenai River Special Management Area. 4) Retain land in state ownership to support the Kenai River Comprehensive Management Plan.

**Unit 393A:** Settlement land - designation that is to encourage a balance between private and public use of state land to allow people to pursue a desired lifestyle. There will be a variety of opportunities, including fee land sales, and long-term use authorizations. To make management of land more efficient, small, isolated parcels of state land will be identified for sale.

**Guidelines:** 1) Managing timber resources for community use is a priority.

**Unit 393B:** Designation - Public Recreation. Goal: Encourage providing access to state land for a wide variety of public uses, such as camping, berry picking, hunting and fishing. Support economic development in tourism by allowing use of state land for commercial recreation leasing. Management is geared toward state and region-wide needs.

**Guidelines:** 1) Manage consistent with the Kenai River Comprehensive Management Plan. 2) Facilitate an addition to the Kenai River Special Management Area.

**Unit 394A:** Designation - Public Recreation. Goal: Encourage providing access to state land for a wide variety of public uses, such as camping, berry picking, hunting and fishing. Support economic development in tourism by allowing use of state land for commercial recreation leasing. Management is geared toward state and region-wide needs.

**Guidelines:** 1) Manage consistent with the Kenai River Comprehensive Management Plan. 2) Facilitate an addition to the Kenai River Special Management Area.

**Unit 394B:** Designation - Public Recreation. Goal: Encourage providing access to state land for a wide variety of public uses, such as camping, berry picking, hunting and fishing. Support economic development in tourism by allowing use of state land for commercial recreation leasing. Management is geared toward state and region-wide needs.

**Guidelines:** 1) open to commercial recreation leasing for visitor facilities.

**Unit 395:** Settlement land - designation that is to encourage a balance between private and public use of state land to allow people to pursue a desired lifestyle. There will be a variety of opportunities, including fee land sales, and long-term use authorizations. To make management of land more efficient, small, isolated parcels of state land will be identified for sale.

**Unit 396:** Designation - Public Recreation. Goal: Encourage providing access to state land for a wide variety of public uses, such as camping, berry picking, hunting and fishing. Support economic development in tourism by allowing use of state land for commercial recreation leasing. Management is geared toward state and region-wide needs.

**Guidelines:** 1) Manage consistent with the Kenai River Comprehensive Management Plan. 2) Facilitate an addition to the Kenai River Special Management Area. 3) Retain land in state ownership to support the Kenai River Comprehensive Management Plan.

**Kenai River Comprehensive Management Plan:** This plan identifies a number of recommendations concerning land and water use within the Kenai River watershed, to be applied on both public and private lands and waters. In general, the plan recommends that a proposed use within one quarter mile of the river would not involve: 1) the degradation of water and/or air quality; 2) harmful alteration of wetlands; 3) danger of increased flood damage or obstruction of flood flow; 4) removal of a substantial amount of natural vegetation, especially mature cottonwood trees; 5) damage to fish and wildlife habitat; and 6) damage to the integrity of the working functions of the river.

As per U.S. Geological Survey, Kenai River power site classification No. 409, all lands within ¼ mile of the Kenai River from the mouth of Russian River upstream to the present bridge across Kenai River at Cooper Landing are classified as a power site (July 10, 1950).

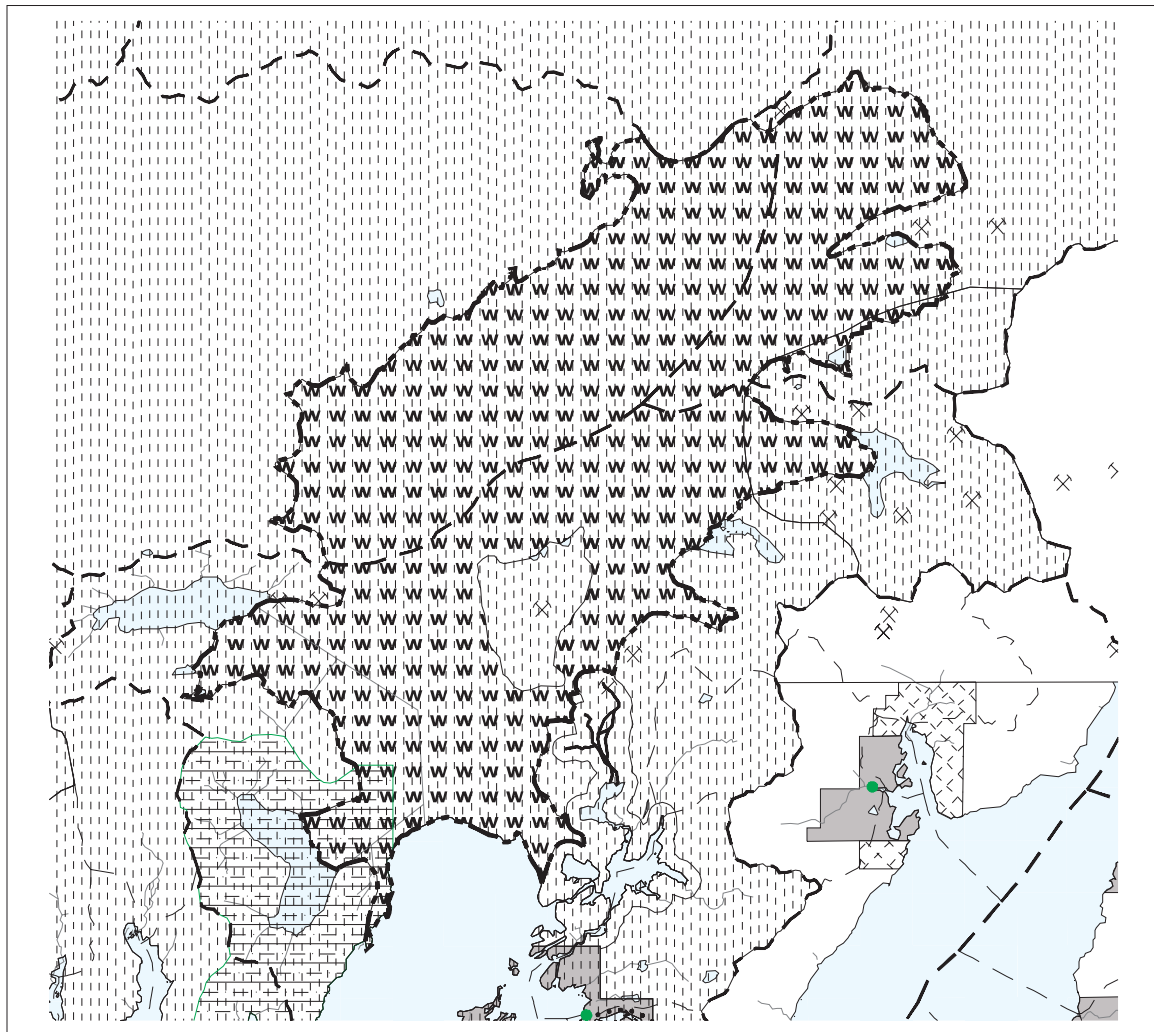
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired and no significant recreation facilities would be developed. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$10,000
Management Plan Development	30,000
Development Costs	0
Operation and Maintenance (annual)	5,000
<b>Total</b>	<b>\$45,000</b>

**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend designation of the Kenai River. Most of the river is in other ownership. The National Forest System portion of the Kenai watershed that supports the fisheries value is very small. The State of Alaska and other landowners do not support a recommendation for designation. They prefer other methods of protections of the river-related values. Its outstandingly remarkable values, water quality and free-flow would likely be protected with the application of the protections specified in the State Area Management Plans. There were relatively few comments on the Kenai River expressing support for designation. The only alternative that recommends the Kenai River for designation is Alternative F. The theme of Alternative F is to recommend all areas that are eligible for congressional designation.

# Wild and Scenic Rivers Eligibility Study COLUMBIA GLACIER Chugach National Forest



0mi

10mi

## LEGEND

r r	Recreational Designation		Proposed Research Natural Areas		Potential Bering River Access
	Scenic Designation		Boundaries of Eligible Buffered Stream or Water Body		Powerline Corridors
w w	Wild Designation		Watershed Boundaries		Railroad
	Other Ownership		Association Boundaries		Trails
	Selected Lands		Streams		Mining Claim as of 1994
	Withdrawals		Eligible Stream or Water Body		Recreation Sites
	Recommended Wilderness or Wilderness Study Area		Existing Roads		Facilities



July 12, 2001



<b>Columbia Glacier</b>
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**Description**

Columbia Glacier is located within the Chugach Icefields Province. The eligible segment is 19 miles long.

The glacier was named during the 1899 Harriman Expedition in honor of Columbia University. The Columbia is the last major tidewater glacier in Prince William Sound to remain in an advanced position within its fiord. Presence of the glacier was first reported in the late 1700s by early explorers Fildago and Vancouver. From that discovery up until very recently, the Columbia has occupied a relatively stable position within its fiord. However, in 1984, the U.S. Geological Survey announced the glacier was beginning a catastrophic retreat. Since 1984, the glacier has retreated almost eight miles. Water depths to 1300 feet are now found in positions just recently occupied by the glacier. Retreat of the glacier is likely to cease within a few decades as the glacier reaches shallow water some 24 miles back from its 1984 terminus. Following retreat, a slow re-advance of the glacial terminus is probable.

Since the early 1900s, the Columbia Glacier has provided an exceptional recreation resource. The sheer glacier face combined with lofty surrounding peaks and glaciers, abundant marine wildlife, and lush coastal vegetation has long made the Columbia an extremely popular destination for both tour boats and the Alaska State Ferry. In recent years, access to the glacier's 300-foot vertical face has been blocked by large, densely packed icebergs. The icebergs themselves remain a spectacular attraction. In addition, flight seeing over the massive (500 square mile) body of Columbia Glacier presents a truly stunning array of rock spires, crevasses, and ice.

The Columbia Glacier is situated immediately adjacent to maritime forest. As the glacier retreats along the coast, plant communities begin to invade the newly exposed ground in remarkable successional patterns. This dynamic shift in vegetation will be in process for many decades to come.

**Eligibility**

The outstandingly remarkable value associated with Columbia Glacier is a geologic feature.

**Classification**

Wild River. The glacier is located within the Nellie Juan-College Fiord Wilderness Study Area and is not currently road accessible.

**Alternatives**

Alternatives C and D: Recommendation of the entire 19 miles as Scenic.

Alternative F: Recommendation of the entire 19 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Columbia Glacier stretches nearly 40 miles high into the Chugach Mountains and ranks as the largest tidewater glacier in Prince William Sound. Among the exceptional features associated with the lower Columbia Glacier are its four glacial-dammed lakes. The two larger lakes, Terentiev and Kadin, lie along its lower west side, while the two remaining lie along the east side. All of the lakes are known or suspected to have outburst events. Outbursts occur when the filled lakes spill out underneath the glacier. The lakes generally empty in a matter of days. After emptying, the glacier collapses over the lake outlet, and the lake begins refilling. Due to retreat, Terentiev is now detached from the main body of the glacier and no longer subject to damming and level fluctuations. Kadin is expanding into a larger lake system as the glacier retreats.

Due to its large ice mass and rapid retreat, the Columbia has exceptionally rapid ice movement. Average velocity of the mainstream of the glacier is about one kilometer (0.6 mile) per year. Lower sections of the glacier show velocities of above two kilometers per year (18 feet/day). This rapid movement leaves the lower portion of the Columbia deeply fractured by swarms of crevasses.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** There are no lands in other ownership adjacent to the glacier corridor.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on federal land that would be curtailed by designation. Because the eligible section of Columbia Glacier includes mostly rock, ice and steep and remote terrain, it is unlikely that a road would ever be proposed within the eligible corridor of the glacier.

*Water Resources:* Designation as a Scenic or Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Designation as a Scenic River would allow new mining claims within the river corridor with mitigation to protect river values. Designation as a Wild River would withdraw the eligible glacier corridor from mineral entry.

*Timber:* The eligible glacier corridor includes only ice fields and there are no timber resources within the corridor. Columbia Glacier is located within the Wilderness Study Area and timber harvest would not be allowed until the wilderness issue was decided. Designation as a Scenic or Wild River would have no effect on future timber harvest.

*Fisheries and Wildlife:* The eligible glacier corridor includes only ice fields and there are no resources within the corridor and little wildlife habitat value. Designation as a Scenic or Wild River would have no effect on future fisheries and wildlife habitat enhancement opportunities.

*Recreation, Scenery:* Designation as a Scenic or Wild River would have no effect on scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the corridor may increase.

*Historical/Cultural:* There are no known Historic/Cultural resources within the corridor.

*Effects of Non-designation:* Little change in the outstanding values of the area is expected since the eligible corridor includes and Columbia Glacier is located within the Wilderness Study Area. Only ice fields and rock are included in the eligible corridor, thus, potential future management activities would have little effect on this geologic feature.

**Suitability Factor #4: Public, state and local governmental interests.** The state has not identified this area for future development of transportation and other infrastructure and no communities are present in the area.

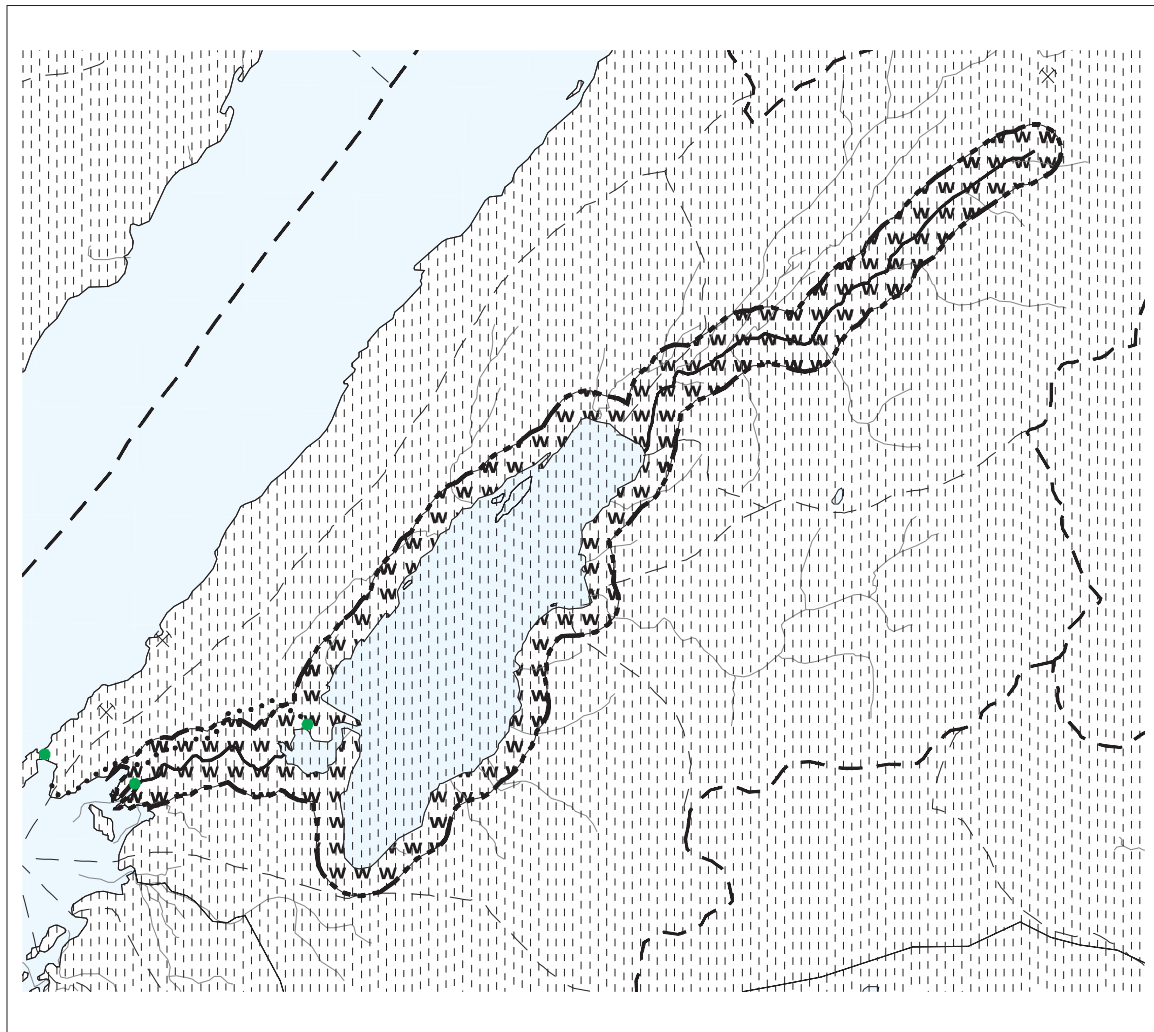
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend Columbia Glacier for designation. We received several negative comments were received on the concept of recommending frozen rivers (glaciers) to be added to the National Rivers System. Many people felt that glaciers should not even be considered as eligible for designation. Others felt that although they may be eligible for designation there is little threat to their outstandingly remarkable values and thus do not need to be designated. Generally there was little public support for recommending any glaciers for designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the Wilderness or the Wilderness Study Area Management Area prescription. Alternatives C, D and F recommend Columbia Glacier for designation because it fits the theme of those alternatives.

# Wild and Scenic Rivers Eligibility Study COGHILL LAKE AND RIVER Chugach National Forest



0mi 1mi 2mi 3mi 4mi 5mi

## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Coghill River</b>
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**Description**

Coghill River is located within the Prince William Sound Mainland Province. The eligible river segment is 11.5 miles long and includes Coghill Lake.

Coghill Lake supports a variety of fish species. These species include pink, chum, coho, chinook, and sockeye salmon. Dolly Varden char, three spine stickleback and sculpin are also found. Though finding all five species of Pacific salmon within one watershed in Prince William Sound (PWS) is very unusual, the numbers of sockeye salmon sets Coghill apart from other watersheds within PWS.

Since 1991, the sockeye escapements have been below optimal, and sport fishing has been curtailed. Beginning in 1993, the USDA Forest Service joined with Alaska Department of Fish and Game and PWSAC in a five-year plan to increase the productivity of Coghill by fertilizing the lake and releasing hatchery-reared Coghill stock juvenile sockeyes at the lake. It is believed that this program will increase sockeye runs so they can provide sport and subsistence fishing opportunities at or above the historic levels.

The Coghill River itself has not been inventoried for cultural resources, but the trail paralleling its north (right) bank which accesses the Forest Service recreation cabin on Coghill Lake, as well as the trail accessing an egg-taking station and the station itself on Coghill River above the lake have been inventoried; all with negative results. However, a Native Chugach Eskimo village not far away may have depended upon the salmon run in Coghill River for a portion of its annual subsistence needs. This village has been evaluated by Bureau of Indian Affairs archeologists and determined eligible for the National Register of Historic Places. This additional possible prehistoric value for the Coghill River indicates that it may have possessed outstandingly remarkable values for hundreds of years, or more.

Originating from Dartmouth Glacier, Coghill River and Lake are integral to the outstandingly remarkable scenery of the Coghill drainage. The waters of Coghill River below Coghill Lake meander to the ocean and a broad inter-tidal plain. Set against the steep mountains, the lake and river dominate the valley bottom, offering spectacular contrasts and scenic beauty.

**Eligibility**

The outstandingly remarkable values associated with the Coghill River are scenery and visual features, fisheries resource values and recreational fishing values.

**Classification**

Wild River. Coghill Lake and River are located within the Nellie Juan-College Fiord Wilderness Study Area, which is not currently road accessible.

**Alternatives**

Alternatives E and F: Designation of the entire 11.5 miles as Wild.

### Suitability

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Coghill Lake produces the largest sockeye salmon return within the western Prince William Sound (PWS). The total optimal return of sockeye salmon to Coghill Lake is considered to be approximately 200,000 harvestable fish, with another 50,000 escapement to the lake.

This run of sockeye, when escapement levels are high, is a very valuable commercial fishery, with harvest levels approaching one million fish, though long-term average has been 185,000 sockeyes. Though access to Coghill is remote and difficult, as one needs a boat capable of safely traversing open saltwater passages or a float-equipped airplane, Coghill had relatively high sockeye sport fishing use. It was one of a few watersheds where sockeye were available for harvest, and certainly had the largest run available in PWS.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** There are no lands in other ownership adjacent to the river corridor.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* Management direction for this area in the Revised Forest Plan is Recommended Wilderness. There are no known transportation corridor plans on federal land that would be curtailed by designation. Designation as a Wild River would prohibit road construction within one quarter of a mile of the river but would be otherwise consistent with a Wilderness designation.

*Water Resources:* Coghill River is located within a Wilderness Study Area. Designation as a Wild River would be unlikely to affect the future availability of or demand for water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state lands in this area are open to mineral entry; however, the area contains no areas of significant known mineral potential. If the area were designated as Wilderness then, subject to valid existing rights, it would be withdrawn to mineral entry. According to the State Area Plan, the portions of Coghill River and Lake identified as navigable are not open to mineral entry. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Since Coghill River is within the Nellie Juan-College Fiord Wilderness Study Area it is currently closed to scheduled timber harvest. There are 1,450 acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* In the Revised Forest Plan this area would provide opportunities to view wildlife but would not be encouraged through management activities. Improvements for fish habitat improvement may be allowed but would be made to blend into the landscape. Designation of the river would help protect the outstandingly remarkable fisheries values but would restrict the construction of some instream fish habitat enhancement structures as per the Wild and Scenic Rivers Act and Forest Service handbook direction.

*Recreation, Scenery:* It is recommended in the Revised Forest Plan that the area be designated as Wilderness and be managed to maintain its existing wilderness character until a decision is made by Congress. Opportunities for solitude, quiet and isolation will be provided for recreationists during cross-country travel. Designation as a Wild River would have no effect on the outstandingly remarkable resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area is expected since the area is recommended to Congress for Wilderness designation. The State Area Plan also emphasizes the need to protect opportunities for fishing and hunting use. The river corridor is located within the Wilderness Study Area.

**Suitability Factor #4: Public, state and local governmental interests.** Coghill River and Lake are located in the Port Wells Management Unit 5 of the Prince William Sound Area Plan for State Lands. This plan indicates that the Coghill River drainage supports one of the most important sport and commercial fishing resources in the Sound. Drift net and purse seine salmon fishermen heavily use Port Wells. Many of the salmon they catch come from the Coghill drainage. Management for public recreation should emphasize protecting the capacity and natural appearance of campsites, anchorages, and the surrounding landscape. Management for fish and wildlife habitat that supports the commercial and sport fishery of the area, including opportunities for enhancement, should be emphasized. Other than the existing State Marine Parks, most state lands in this unit remain open to mineral entry.

**Subunit 5A - Coghill** - This subunit includes the state claimed tidelands, Coghill Lake, and navigable (as determined by the state) portions of the Coghill River. Salmon originating in the Coghill River support much of the Port Wells commercial drift net and purse seine fisheries. Because this area is critical to the sport and commercial fishery in the Prince William Sound, state management of these lands will emphasize the protection of the fishery resource. The subunit also contains habitat important for nesting, molting, seasonal concentrations, and

hunting of waterfowl. While a part of the Coghill River upstream from the lake contains moderate potential for placer mining, the state claimed portion of the drainage will be closed to new mineral entry to protect salmon spawning and prevent conflicts with the fishery resources.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

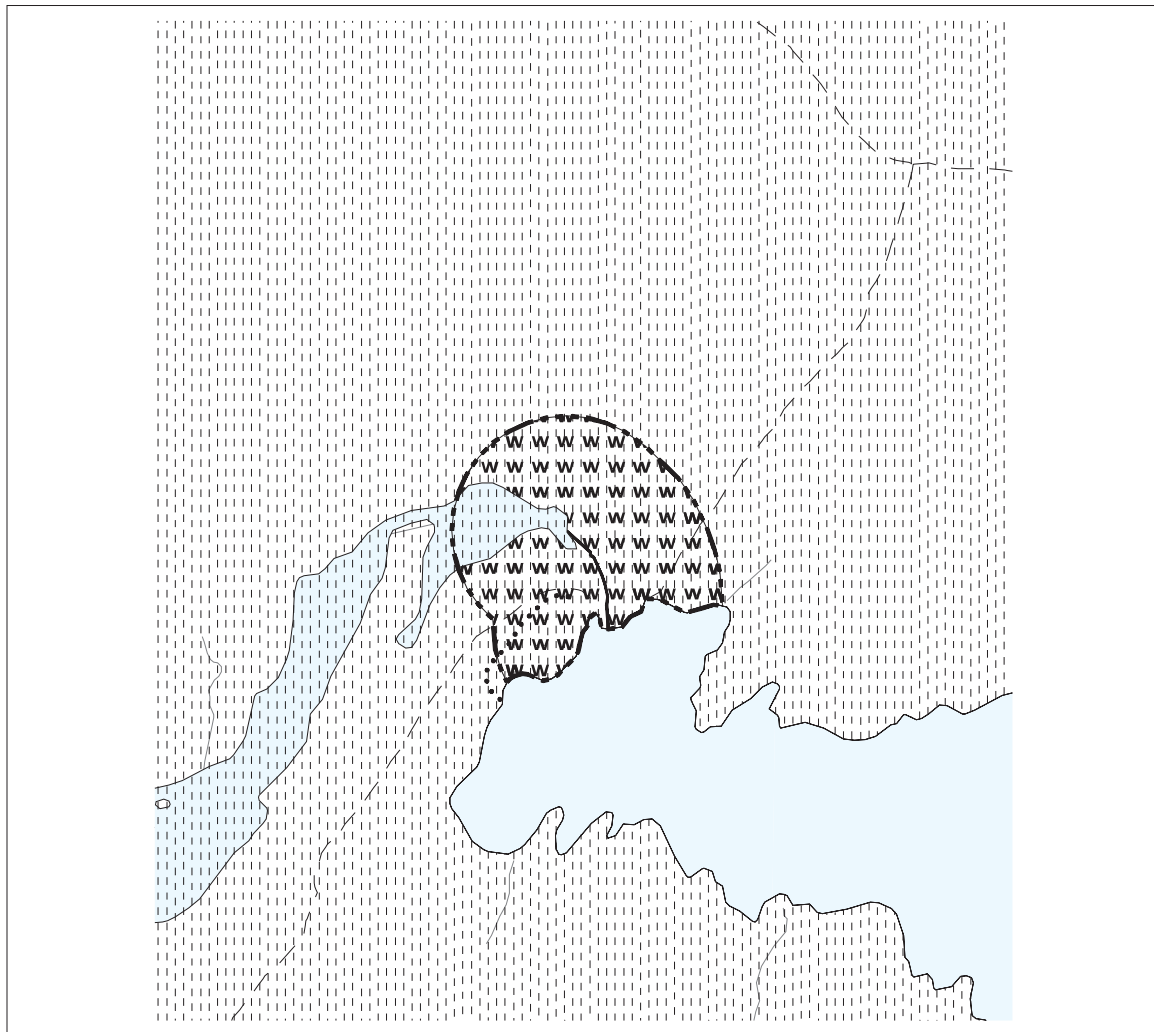
General Administration	Not Estimated
Cost of Implementation	\$5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend the Coghill River for inclusion in the National Wild and Scenic River System. There were relatively few comments on Coghill River expressing support for designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the Wilderness or Wilderness Study Area Management Area prescription. Alternatives E and F recommend Coghill River for designation because they have similar themes that support designation of nearly all eligible rivers.



# Wild and Scenic Rivers Eligibility Study CASCADE CREEK Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Cascade Creek</b>
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**Description**

Cascade Creek and Falls are located within the Prince William Sound Mainland Province. The falls are located in the northwestern portion of Prince William Sound in Cascade Bay. The eligible river segment is 2 miles long.

**Eligibility**

The outstandingly remarkable value associated with Cascade Creek is a visual feature (waterfall).

**Classification**

Wild River. Cascade Creek is located in an unnamed drainage that flows into Cascade Bay in Prince William Sound. There are currently no roads in this area.

**Alternatives**

Alternatives C, D, E, and F: Recommendation of the entire 2 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The roar of the Cascade Creek Falls dominates as one enters Cascade Bay. Slowly unfolding into view as one floats into the bay, the full impact of the falls is not realized until you are right in front of the falls. From over 100 feet, Cascade Falls tumbles directly into the ocean. The largest falls in the Sound (volume of water), the falls are an outstandingly remarkable feature of Cascade Bay, dominating the senses with sound, movement, and scenic beauty.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** There are no lands in other ownership adjacent to the river corridor.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on federal land, which would be curtailed by designation. Since Cascade Creek is within the Wilderness Study Area it is currently closed to road construction. In the Revised Forest Plan this area is recommended for Wilderness designation, which would prohibit Forest Service road construction.

*Water Resources:* Designation as a Wild River would unlikely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry, however, the area contains no areas of significant known mineral potential. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Since Cascade Creek is within the Wilderness Study Area it is currently closed to scheduled timber harvest. There are 30 acres within the river corridor that are tentatively suitable for timber harvest.

*Fisheries and Wildlife:* In the Revised Forest Plan this area would provide opportunities to view wildlife but would not be encouraged through management activities. Improvements for fish habitat improvement may be allowed but would be made to blend into the landscape. Designation of the river would help protect the outstandingly remarkable fisheries values but would restrict the construction of some instream fish habitat enhancement structures.

*Recreation, Scenery:* It is recommended, in the Revised Forest Plan, that the area be designated as Wilderness and will be managed to maintain its existing wilderness character until a decision is made by Congress. Opportunities for solitude, quiet and isolation will be provided for recreationists during cross-country travel. Designation as a Wild River would have no effect on the outstandingly remarkable resource values. Some increase in recreation use may be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the area is recommended for Wilderness designation and the State Area Plan emphasizes the need to protect opportunities for fishing and hunting use.

**Suitability Factor #4: Public, state and local governmental interests.** Cascade Creek is located in the Eaglek Bay Management Unit 18 of the Prince William Sound Area Plan for State Lands. Management intent in the plan emphasizes protection of recreation and fish and wildlife resource values. This includes access points such as anchorages, campsites, areas of seasonal waterfowl concentrations, and fishery resources. Most of the state claimed lands remain open to mineral entry.

**Subunit 18F - Cascade Creek** - This subunit boasts the largest and one of the most beautiful waterfalls in Prince William Sound. The area is also important as a potential hatchery site. Long-term tideland leases or permits for uses that would foreclose its eventual use for hatchery or would detract from the scenic quality of the area will not be given. Public access to the waterfall and surrounding uplands will be protected.

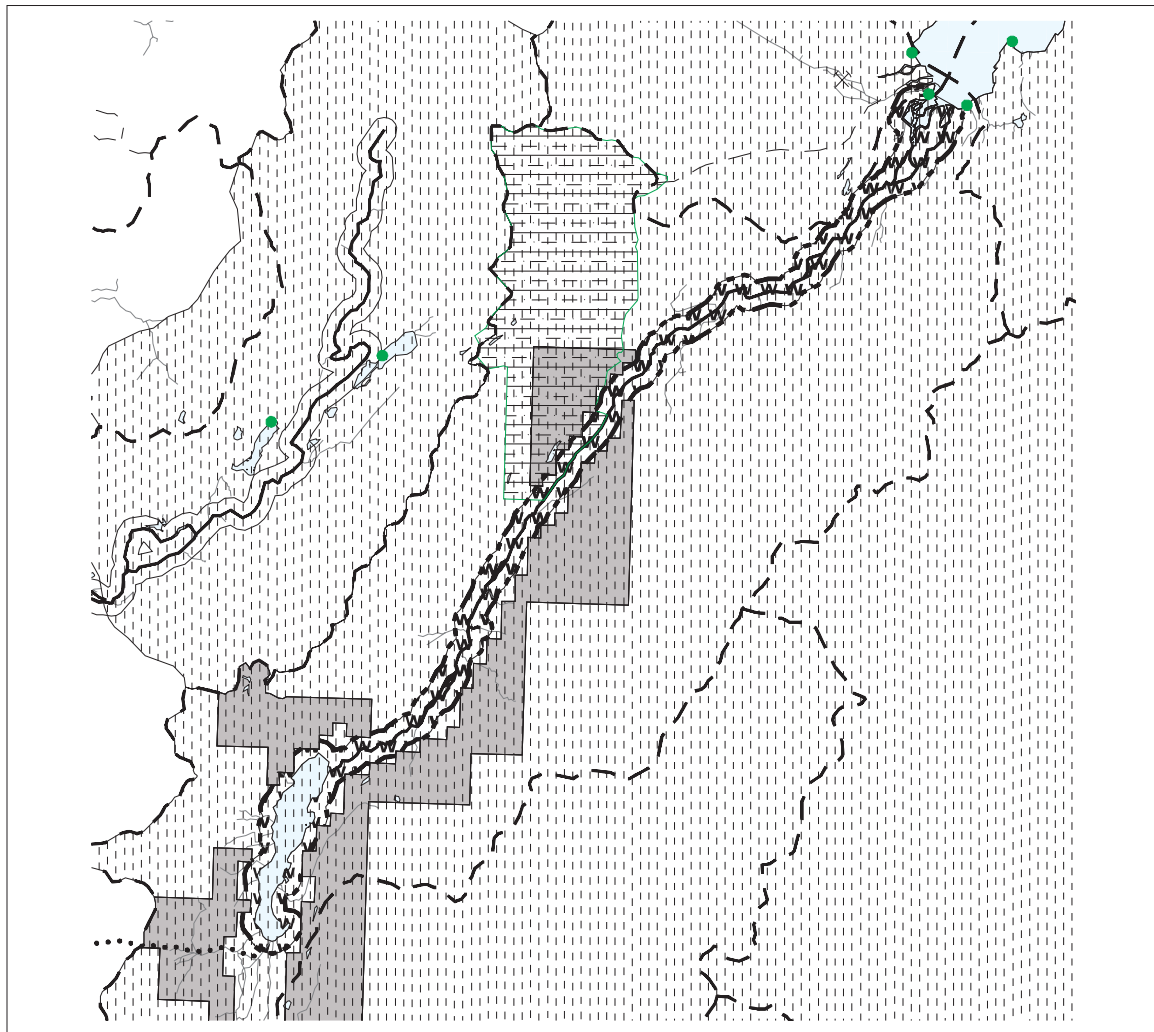
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend Cascade Creek for designation. There were relatively few comments on Cascade Creek expressing support for designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the Wilderness or Wilderness Study Area Management Area prescription. Alternatives C, D, E, and F recommend Cascade Creek for designation.

# Wild and Scenic Rivers Eligibility Study NELLIE JUAN RIVER Chugach National Forest



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## LEGEND

r r	Recreational Designation		Proposed Research Natural Areas		Potential Bering River Access
s s	Scenic Designation		Boundaries of Eligible Buffered Stream or Water Body		Powerline Corridors
w w	Wild Designation		Watershed Boundaries		Railroad
	Other Ownership		Association Boundaries		Trails
	Selected Lands		Streams		Mining Claim as of 1994
	Withdrawals		Eligible Stream or Water Body		Recreation Sites
	Recommended Wilderness or Wilderness Study Area		Existing Roads		Facilities



July 12, 2001

<b>Nellie Juan River</b>
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**Description**

The Nellie Juan River is located within the Chugach Icefields Province. The eligible river segment is 25.1 miles long.

With headwaters originating at Nellie Juan Lake, Nellie Juan River flows a spectacular 25.1 miles from the alpine of the Kenai Peninsula into Kings Bay of Prince William Sound. The Nellie Juan River lies in a recently deglaciated remote valley.

**Eligibility**

The outstandingly remarkable values associated with the Nellie Juan River are recreational whitewater boating, scenery and visual features.

**Classification**

Wild River. The Nellie Juan River is located within the Nellie Juan-College Fiord Wilderness Study Area, which is not currently road accessible.

**Alternatives**

Alternatives B and C: Recommendation of the entire 25.1 miles as Scenic.

Alternative E and F: Recommendation of the entire 25.1 miles as Wild.

Preferred Alternative: Recommendation of the lower 9.6 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** With headwaters originating at Nellie Juan Lake, Nellie Juan River flows a spectacular 25.1 miles from the alpine of the Kenai Peninsula into Kings Bay of Prince William Sound. The Nellie Juan River lies in a recently deglaciated remote valley. These 25.1 miles of outstandingly remarkable continuous whitewater and spectacular scenery make the Nellie Juan River eligible for inclusion in the Wild and Scenic River system.

The Nellie Juan River has approximately 25.1 miles of uncharted continuous Class V whitewater. This whitewater opportunity for expert kayakers is unparalleled in Prince William Sound. This river is very remote, but has a floatplane accessible put-in on Nellie Juan Lake, and a floatplane or boat accessible take-out at the river's mouth on Kings Bay. The run is an extremely challenging and remote whitewater experience. It offers not only difficult whitewater paddling, but also challenging portages, potential encounters with brown bears, and intense adventure. The course of the river alternates between daunting, steep-walled rock canyons with turbulent whitewater drops, and broad, open-valley segments with braided stream channels and stunning views of adjacent glaciers and glacial features. Although run infrequently, this river remains on the life list of many experts as a "someday" opportunity.

The backdrop to this outstandingly remarkable whitewater river is no less than incredible in itself. The spectacular scenery in this watershed is outstandingly diverse, varying from high mountain alpine, barren rock peaks, and glaciers to

rain forests and a glacial outwash plain pouring into Prince William Sound. To the east, at least a dozen finger glaciers spill down from the Sargent Icefield to within close range of the river. An additional five glaciers are perched along the river's west side. Many areas at the base of these finger glaciers have been exposed only within the last few decades, as ice has retreated. In fact, the entire Nellie Juan Valley provides a dramatic display of glacier features exposed likely only within the last millennium.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the river corridor include Chugach Alaska Corporation (CAC) land.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* CAC has identified a potential road access corridor to their private lands located adjacent to the upper 10.4 miles of the river. CAC was concerned that a Wild designation on the upper section of Nellie Juan River would make it unreasonably difficult for them to access their private land by road in the future. Since the Nellie Juan River is within the Wilderness Study Area it is currently closed to Forest Service road construction. Designation as a Wild River would further limit Forest Service road construction within one-quarter mile of the river corridor.

*Water Resources:* Nellie Juan River and Lake lands, under the jurisdiction of the Department of the Interior, are classified as powersites. Public Land Order 3665, Alaska, Powersite Classification No. 465, June 16, 1965. There has been no known interest or activity related to this potential powersite since 1965 based upon a review of Forest Service land status records.

The Wild and Scenic Rivers Act prohibits FERC from licensing new construction of hydroelectric facilities under the Federal Power Act "on or directly affecting" a designated Wild and Scenic River.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry; however, the area contains no areas of significant known mineral potential. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Since Nellie Juan River is within the Wilderness Study Area it is currently closed to scheduled timber harvest. There are 330 acres of land that are tentatively suitable for timber production within the river corridor.

*Fisheries and Wildlife:* In the Revised Forest Plan this area would provide opportunities to view wildlife but would not be encouraged through management activities. Improvements for fish habitat improvement may be allowed but would be made to blend into the landscape. Designation of the river would help protect

fisheries values but would restrict the construction of some instream fish habitat enhancement structures and wildlife habitat manipulations using motorized equipment.

*Recreation, Scenery:* In the Revised Forest Plan opportunities for solitude, quiet and isolation will be provided for recreationists during cross-country travel. Designation as a Wild River would have no effect on the outstandingly remarkable resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area is expected since the river corridor is located in the Wilderness Study Area.

**Suitability Factor #4: Public, state and local governmental interests.** The Nellie Juan River is located within the Port Nellie Juan Management Unit 11 of the Prince William Sound Area Plan for State Lands. According to the Plan the unit contains no areas with significant known mineral values. This unit, along with College-Harriman Fiord and the Columbia Glacier, is one of three main destinations for cruise ships, outside of communities. From its entrance to Derickson Bay, Port Nellie Juan receives moderate public use by all types of recreation watercraft. Important habitat includes waterfowl nesting and molting habitat in the headwaters of King's Bay and the seal habitat throughout much of the unit. King's Bay is used for subsistence seal hunting by residents of Chenega Bay. State claimed lands within this unit (none near the Nellie Juan River) would be managed for fish and wildlife habitat and harvest, recreation, and wilderness values. Emphasis will be on maintaining the area's isolated and scenic landscape. Uses that create significant permanent visual intrusion or concentrate public use are not compatible with this intent. For that reason, float-lodges and similar commercial recreation facilities are prohibited in the unit. Most state lands remain open to mineral entry.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

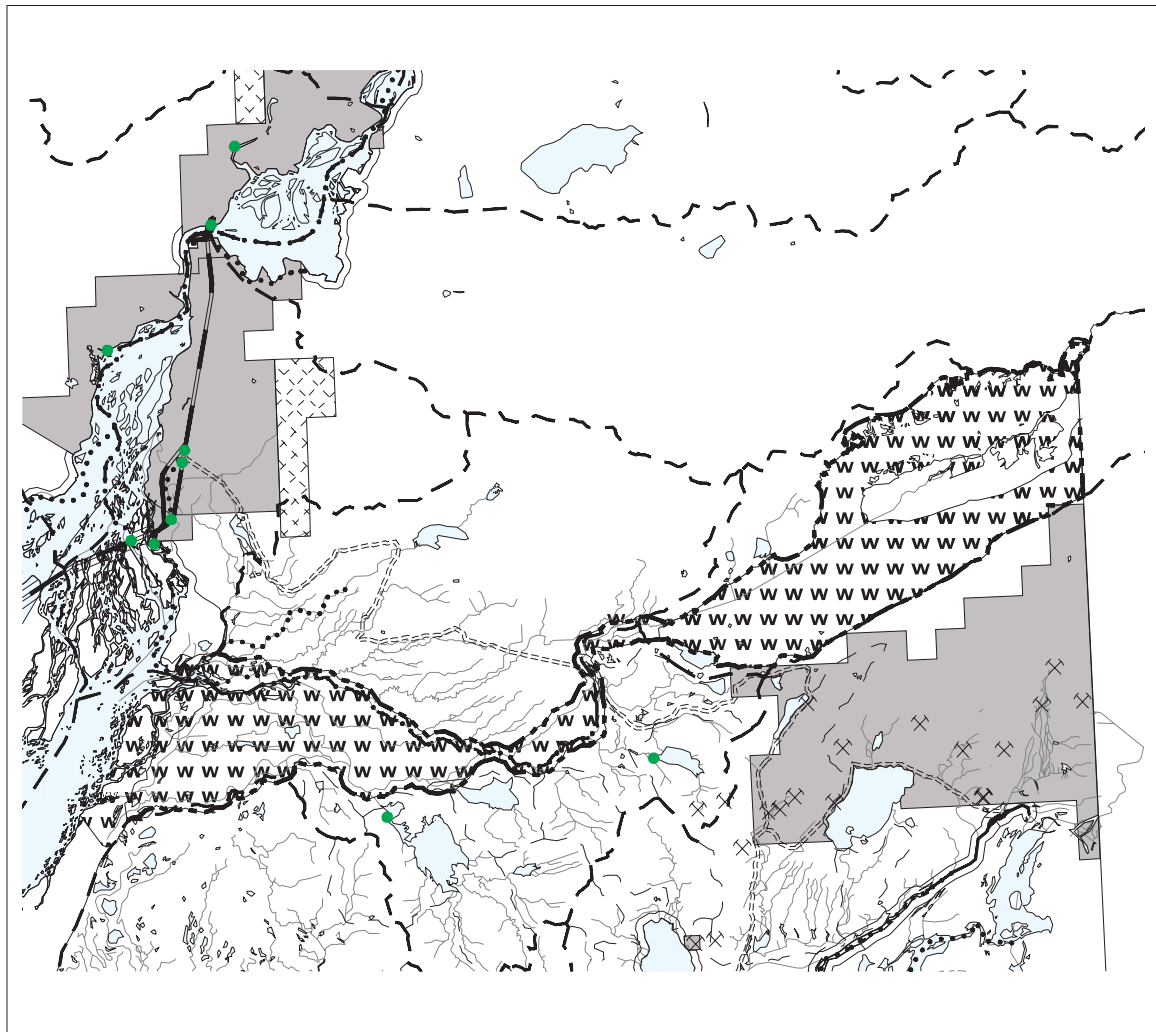
General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>



**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan recommends designation of Nellie Juan River as a Wild River from the mouth up to the start of CAC lands (9.6 miles). CAC owns land near the river on the upper 15.5-mile segment of the river. The 9.6-mile segment of river that is recommended for designation is located on the lower section of river below CAC lands. This recommendation responds to their concern that designation would affect access to their lands. The entire 25.1 miles of Nellie Juan River eligible for designation is inventoried as Wild. Classification of the lower portion of the Nellie Juan River as Wild is consistent with the Recommended Wilderness prescription applied to adjacent lands in the area. Public comments generally supported the designation of the Nellie Juan River as a Wild River. The entire river is recommended for designation in Alternatives C, D, E, and F.

# Wild and Scenic Rivers Eligibility Study MARTIN GLACIER AND MARTIN RIVER Chugach National Forest



0mi 10mi 20mi

## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Martin Glacier</b>
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**Description**

Martin Glacier is located in the St. Elias Icefields Province. The eligible segment is 18 miles long.

Martin Glacier is a "land-based" glacier of just over 150 square miles at the eastern end of the Chugach National Forest. About half its 30-mile length lies within the Forest, with its eastern portion lying on lands managed by the Bureau of Land Management. It is the source of the Martin River, and gives the river its glacially derived character. Pothole lakes have developed around the margin of Martin Glacier's terminus. These ponds form as glacier ice melts under its cover of rock moraine. Debris, shrubs, and even trees fall into these ponds as they melt and expand in size. Lateral moraines and trim lines along the sides of the glacier have formed in strong bands, revealing the gradual recession of the Martin Glacier over the last several thousand years.

In its lower reaches, the glacier thins significantly, and the ice "grounds," ceasing to show much forward movement. Moving glacial ice, from up valley, thrusts up and over grounded ice near the glacier's terminus. In doing so, additional rock and sediment debris is dredged up from underneath the glacier and carried out over the top of the grounded ice blocks, further thickening the moraine cover.

At the base of the glacier, a debris layer ranging from one to tens of feet thick has formed over the top of the ice. This debris layer insulates the glacier from melt during the summer and greatly slows the rate of ice melt near the terminus. In this manner soils and vegetation have time to form on top of the glacier. The uniform ice flow patterns seen on the surface of the upper glacier turn to wild, sinuous bands, and then to solid surface moraine moving down glacier.

Lateral moraines along the sides of Martin Glacier have formed in discrete, parallel bands as the glacier has diminished in length and thickness. Only limited study has been done on these moraines, however, they carry a wealth of information on the recent glacial history of the region.

**Eligibility**

The outstandingly remarkable value associated with Martin Glacier is a geologic feature.

**Classification**

Wild River. Martin Glacier is located in a very remote portion of the Copper River Delta and is currently roadless.

**Alternatives**

Alternatives D, E and F: Recommendation of the entire 18 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The Martin Glacier has a number of outstanding glacial features. A thick surface moraine has developed over the lower portions of the glacier. In some areas, rudimentary soils have developed

over the top of the glacier and vegetative communities have sprung up. Shrub communities are pervasive, and along the southwest edge of the glacier, mature spruce forests have actually developed (over ice.) This "glacier forest" is quite unusual on the Chugach National Forest.

One of the remarkable features of the Martin Glacier is the huge load of rock and sediment carried down on top of the glacier. This large debris load relates in part to the erodibility and fractured character of the mountains surrounding the glacier. The glacier's relatively slow movement also gives fallen rock more time to build up on the ice surface as it is transported down valley. Following the March 27, 1964, earthquake, six large rockslides were noted to have spilled down onto the upper portions of the glacier. Together these rockslides amounted to about 24 million cubic meters of rock (equal to 30 square miles, one foot deep.) A combination of numerous rock slides and simple rock falls have built up large quantities of debris on the surface of Martin Glacier.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the glacier corridor include CAC lands to the south (Bering River coalfield).

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* A road easement has been agreed upon to allow CAC to build a road from the Copper River Highway to the coalfield. CAC has additional rights of access to the coast between Strawberry Point and Martin Islands. None of the proposed road locations involve Martin Glacier. Designation as a Wild River would prohibit road construction within a quarter of a mile of the glacier on federal lands.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* The Bureau of Land Management has designated the area east of the Copper River as a Favorable Petroleum Geological Province. Information currently available indicates that the area has a low potential for the production of oil and gas. Designation as a Wild River would restrict new mining claims on mineral development and/or leases within a quarter of a mile on federal lands. The glacier corridor would be withdrawn from mineral entry.

*Timber:* The eligible glacier corridor includes only ice fields and there are no timber resources within the corridor. Designation as a Wild River would have no effect on future timber harvest scheduling.

*Fisheries and Wildlife:* The eligible glacier corridor includes only ice fields and there are no resources within the corridor and little wildlife habitat value. Designation as a Wild River would have no effect on future fisheries and wildlife habitat enhancement opportunities.

*Recreation, Scenery:* Designation as a Wild River would have no effect on scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* There are no known Historic/Cultural resources within the glacier corridor.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the eligible river corridor includes only ice fields and potential future management activities would have little effect on this geologic feature.

**Suitability Factor #4: Public, state and local governmental interests.** The state has not identified this area for future development of transportation and other infrastructure and no communities are present in the area.

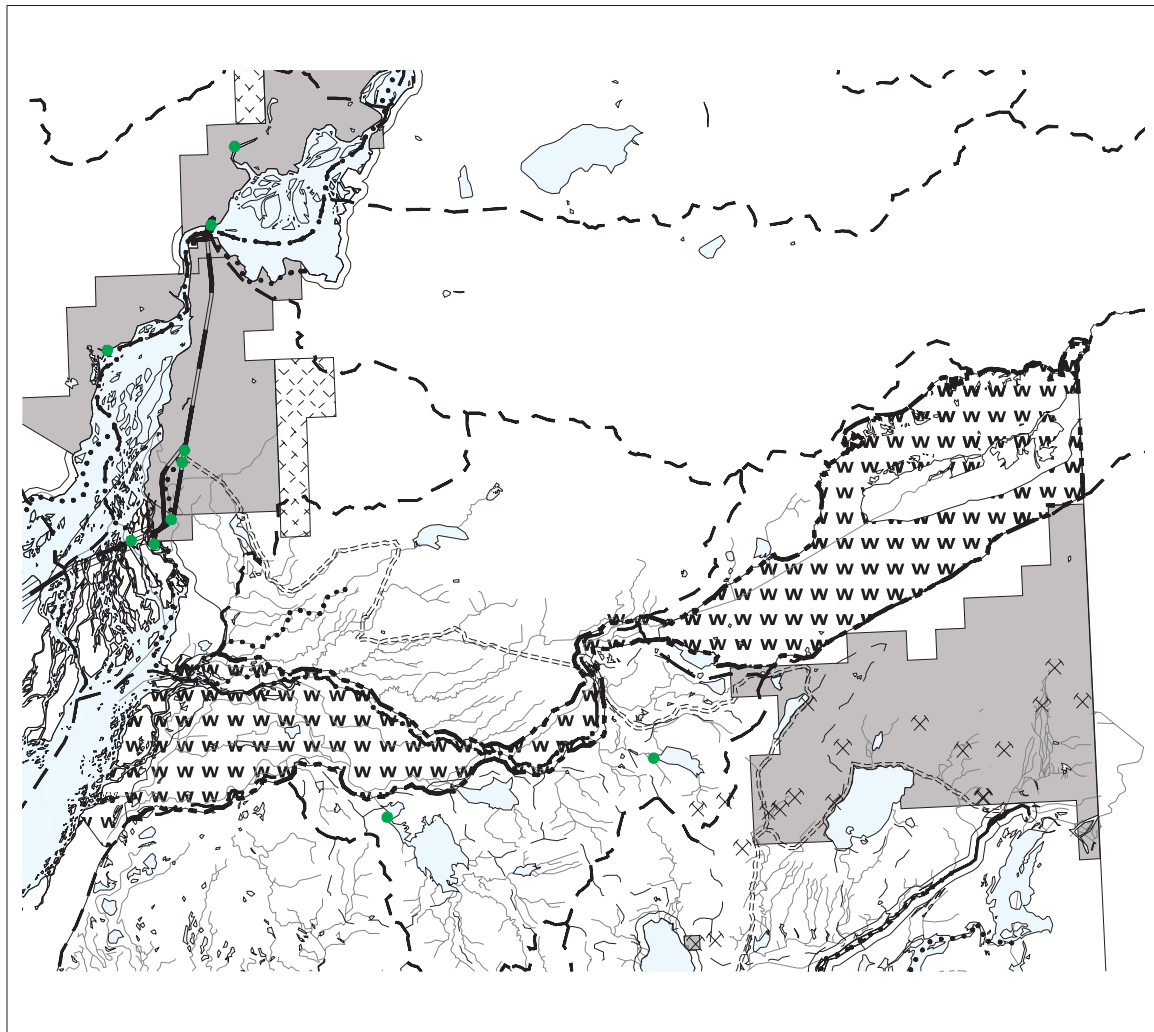
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend designation of Martin Glacier. Several negative comments were received on the concept of recommending that frozen rivers (glaciers) be added to the National Rivers System. Many people felt that glaciers should not even be considered as eligible for designation. Others felt that although they may be eligible for designation there is little threat to their outstandingly remarkable values and thus do not need to be designated. Generally there was little public support for recommending any glaciers for designation. There was considerable opposition to congressional designations in Cordova because residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) Recommended Wilderness Management Area prescription. Alternatives D, E and F recommend Martin Glacier for designation.

# Wild and Scenic Rivers Eligibility Study MARTIN GLACIER AND MARTIN RIVER Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Martin River and Lake</b>
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**Description**

Martin River and Lake is located within the Pacific Gulf Coast Forest Meadow Province. The eligible river segment is 26.3 miles long.

**Eligibility**

The outstandingly remarkable values associated with Martin River and Lake are scenery and visual features, recreational values, geologic features and fisheries resource values.

**Classification**

Wild River with a 1.8-mile segment as Scenic. The area is not currently road accessible.

**Alternatives**

Alternatives D, E and F: Recommendation of 24.5 miles as Wild and 1.8 miles as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The scenery and visual features of the Martin River are regionally or nationally significant with high relief and steep snowcapped mountains at the headwaters of the river and along sides of this major drainage. Martin River Glacier forms the headwaters of the Martin River and is a high value scenic visual feature. Scenery and visual features are enhanced by a diversity of landforms including broad flat valley bottoms to steep mountains and glaciers. Vegetation types are highly variable. Vegetation types vary depending on location along river, but include wet muskeg and ponds, low shrubs (alder and willow), extensive cottonwood stands, and spruce hemlock forest. It shows interesting patterns and textures with lush green color combinations in foreground contrast with white snowcapped mountains, glaciers, and blue skies in background. Steep mountains, blue glaciers, and timbered slopes dominate distant scenery.

Recreation values of the area are regionally or nationally significant. The area is popular for moose hunting and a Forest Service cabin is available on Martin Lake. The area is a popular fishing spot for cutthroat trout and Dolly Varden char. It offers a diversity of remote recreation opportunities. The river is long, large, and remote, but accessible via float and wheeled plane or boat. River-related recreation opportunities include sightseeing, wildlife observation, photography, fishing, hunting, hiking, mountain climbing, backpacking, and camping. The Martin River area is a river of pristine quality. It is located on the East Delta, is remote and is the "heart" of the East Delta. It provides opportunities for "primitive" recreation experiences of high quality along the entire length of river. Although remote, the river has several trail access points along its length, making the river "accessible" for use. The area has a diversity and abundance of wildlife and fish species. Interesting natural features include Martin River Glacier, Little Martin and Martin Lakes, surrounding mountainous

terrain, and broad valley bottoms. Recreational float trips of approximately 25 miles are possible on the Martin River. It could be floated in two to three days or longer if desired. The Martin River Glacier is approximately 35 miles long and 5 miles wide and is the major source of water for this river system.

Fisheries values are regionally significant because it has the largest run of anadromous cutthroat trout in the area. There is a possibility of this run being a different genetic stock than others in the region. It is locally significant due to species diversity - all 5 species of salmon present (sockeye, coho, chinook, steelhead/rainbow, cutthroat, dollies, pink, chum) and production capabilities. It has exceptional overall fisheries habitat quality (on Forest) especially rearing habitat. It is a high value resource to commercial fishermen.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the river corridor include CAC lands to the southeast (Bering River coalfield).

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* A road easement has been authorized by the Forest Service to allow CAC to build a road from the Copper River Highway to the coalfield. The road easement intersects the river corridor at one point. The river would need to be segmented and classified as a Scenic River at that point to allow the road to cross the river corridor. CAC has additional rights of access to the coast between Strawberry Point and Martin Islands. Designation as a Wild River would prohibit road construction within a quarter of a mile of the river on federal lands.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* The Bureau of Land Management has designated the area east of the Copper River as a Favorable Petroleum Geological Province. Information currently available indicates that the area has a low potential for the production of oil and gas. Designation as a Wild River would restrict new mining claims and leases on mineral development, within a quarter of a mile on federal lands, and withdraw the river corridor from mineral entry.

*Timber:* Lands in this area are open to scheduled timber harvest in Alternatives A, B and No Action. Designation as a Wild and Scenic River would allow some timber harvest activities to accomplish other resource objectives with some mitigation requirements to protect river values. There are 870 acres of land that are tentatively suitable for timber harvest within the river corridor.



*Fisheries and Wildlife:* The eligible river corridor includes high value fish and wildlife habitat value. Designation as a Wild River would have no effect on future fisheries and wildlife habitat enhancement opportunities because the Revised Forest Plan provides for the conservation of fish and wildlife and their habitats with the ANILCA 501(b) area.

*Recreation, Scenery:* Designation as a Wild River would have no effect on scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* There are no known Historic/Cultural resources within the river corridor.

*Effects of Non-designation:* Outstandingly remarkable scenic, recreational, geologic features, and fisheries values could be adversely affected if the river were not designated as a Recreational River. Potential timber harvest in or adjacent to the river corridor in Alternatives A, B and No Action would likely be visible from the river corridor.

**Suitability Factor #4: Public, state and local governmental interests.** The state has not identified this area for future development of transportation and other infrastructure and no communities are present in the area.

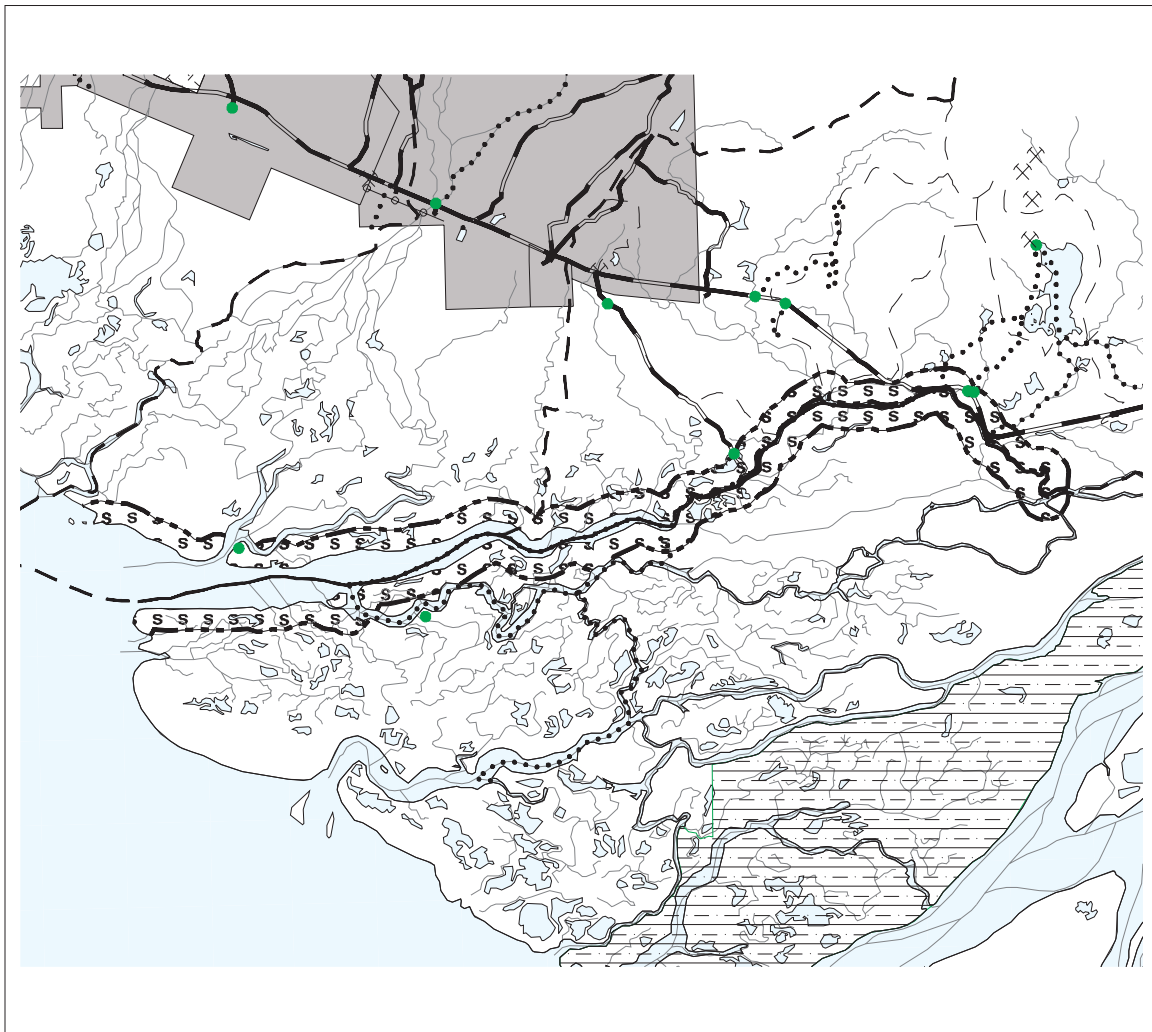
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend designation of Martin River and Lake. There was considerable opposition to congressional designations in Cordova as residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) - 1 Management Area prescription. Alternatives D, E and F recommend Martin River and Lake for designation as a Wild and Scenic River.

# Wild and Scenic Rivers Eligibility Study ALAGANIK SLOUGH Chugach National Forest



0mi 1mi 2mi 3mi 4mi 5mi 6mi 7mi

## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Alaganik Slough and Unnamed Tributary</b>
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**Description**

The Alaganik Slough and unnamed tributary are located within the Alaska Mixed Forest Province. The eligible river segment is 13 miles long.

The Alaganik Slough has typical scenery of west delta sloughs, however is accessible with trails, picnic areas and boat ramps. Alaganik is thoroughfare for coho and sockeye salmon. West Delta is productive for coho. Productive habitat is ponds and feeder streams into Alaganik. The Copper River Delta provides abundant habitat for various wildlife species.

**Eligibility**

The outstandingly remarkable values associated with Alaganik Slough and unnamed tributary are historic/cultural values.

**Classification**

Scenic River. The Copper River Highway is located adjacent to the eligible portion of Alaganik Slough and unnamed tributary and is within the Alaganik Historical/Archaeological District.

**Alternatives**

Alternatives E and F: Recommendation of the entire 13 miles as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Historical/Cultural: NR Alaganik Slough - The right bank (N) of Alaganik Slough from its fork from the Copper River to the mile 23 crossing of the Copper River Highway is uninventoried. A small portion of the bank downstream has been inventoried by the Forest Archeologist, Archeologists for the Bureau of Indian Affairs evaluating ANCSA 14(g)(1) sites and the Alaska State Office of History and Archeology archeologists/historians conducting a survey for widening and improvement of the Copper River Highway. Near the Copper River Highway and Alaganik Slough are located Rosenberg's Trading Post, two Native Eyak villages, two Eyak cemeteries, the ruins of a fox farm, and altered drainage patterns of tributary streams to accommodate construction of the Copper River and North Western Railway which originally occupied the right-of-way of the current highway and a segment of which has been determined eligible for the National Register of Historic Places. With the exception of the fox farm, the remaining historic features have been named to Alaganik Archeological District. The fox farms and earlier Native communities depended upon its fish runs and transportation capability for shallow draft boat access for an enhanced standard of living. The Alaganik Archeological District has been selected by CAC as an ANCSA 14(h)(1) site, which will probably be conveyed to them in the near future. The Alaganik Slough day use area and improvements, both within the Archeological District and approximately four miles downstream from it, again

on the right bank, have been inventoried with negative results. With these exceptions, the rest of Alaganik Slough and those, south, east, and west of it are uninventoried.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** This area is within the Copper River Delta Management Unit 28. In this unit, the state manages only the Copper River Highway right-of-way, the tidelands, and the land beneath the Copper River and other navigable waters. The state has selected two small parcels south of the highway near Cordova airport. The airport selections were selected for sand and gravel resources and possible landfills or light industrial uses.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on federal land that would be curtailed by designation. Designation as a Scenic River would limit road construction only to the extent that is required to protect the outstandingly remarkable values.

*Water Resources:* Designation as a Scenic River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Designation as a Scenic River would restrict mineral development but would not preclude it.

*Timber:* Although the area is available for timber harvest scheduling in Alternatives A, B and No Action, the design of such must be consistent with the primary purpose of management for the area to conserve fish and wildlife habitat values. Designation as a Scenic River would allow for timber harvest consistent with the primary management purpose if the outstandingly remarkable values, water quality and free-flow characteristics could be maintained. There are 130 acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* The primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the Alaska National Interest Lands Conservation Act (ANILCA), Section 501(b). Designation as a Scenic River could restrict fish enhancement opportunities somewhat if the proposed projects involved water diversions or impedance of flow but would otherwise be consistent with the purposes of ANILCA.

*Recreation, Scenery:* Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and unknown historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b).

**Suitability Factor #4: Public, state and local governmental interests.** The entire river corridor is located within the Alaska State lands management unit 28 - Copper River Delta. In this unit, the state manages only the Copper River Highway right-of-way and the land beneath the Copper River as a navigable river. Most of the area with outstandingly remarkable wetlands habitat values is within the State Copper River Delta Critical Habitat Area (SCHA). The Alaska Department of Transportation and Public Facilities manage the Copper River Highway right-of-way.

State lands in this unit, except the right-of-way lands, are open to mineral entry. However, the area contains no areas with significant known mineral potential. Sand and gravel deposits occur along the highway corridor, and there is oil and gas north of Softuk Bar. The state is a party to the Copper River Delta Fish and Wildlife Memorandum of Understanding for the Cooperative Management of the Copper River Delta Fish and Wildlife Management Area.

**Subunit 28B - Cordova Airport Selections** - the state land selections are located northwest of the Cordova Airport and about four miles southeast of the airport. Both were selected for sand and gravel resources and possible landfills or light industrial uses. Sand and gravel extraction is allowed from these lands if consistent with the purpose of the SCHA.

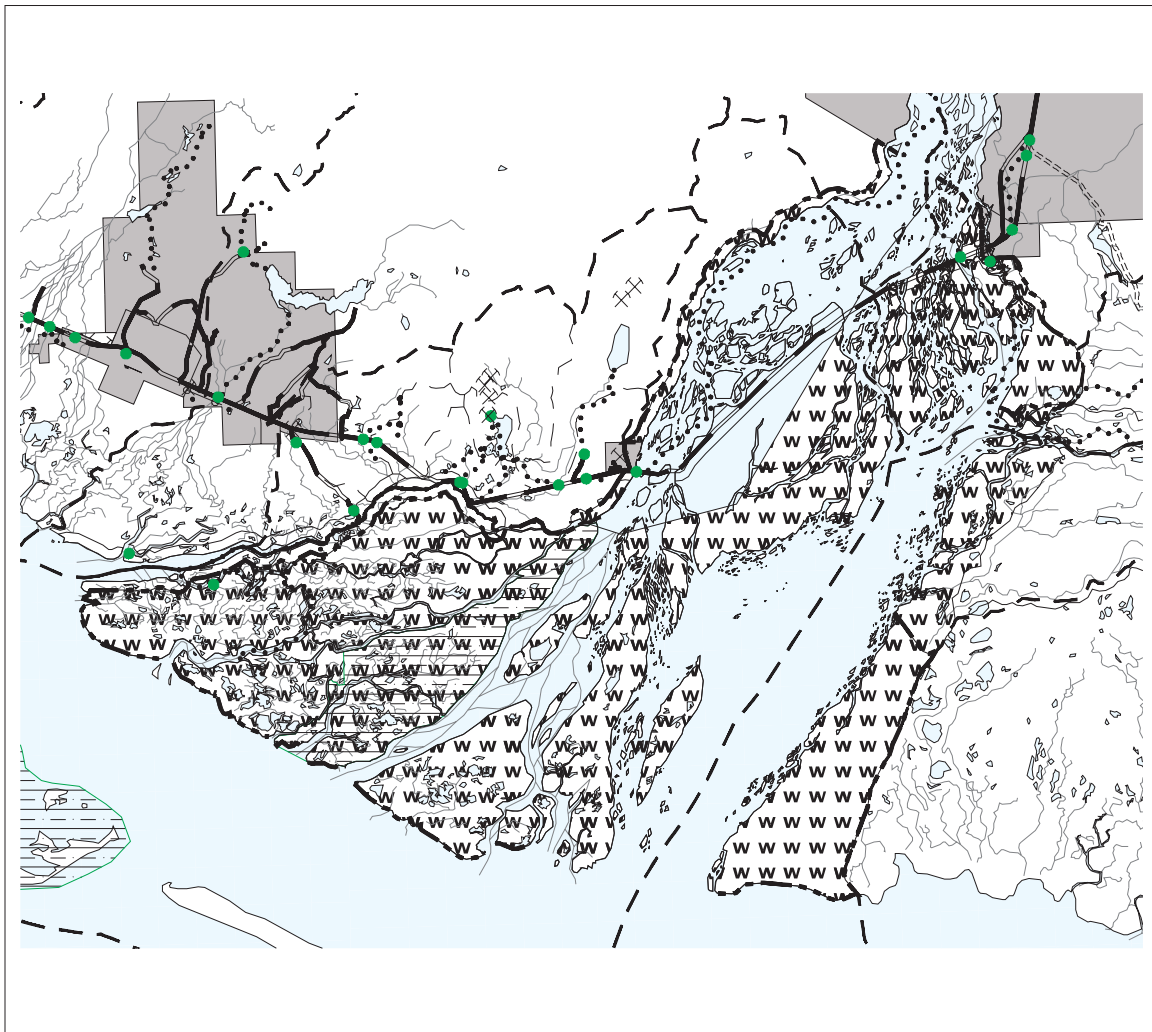
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$27,500</b>

**Suitability and Nonsuitability Determinations:**

Alaganik Slough and unnamed tributary are not recommended for designation in the Revised Forest Plan. There was considerable opposition to congressional designations in Cordova. Residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) - 2 Management Area prescription and congressional direction in ANILCA. Alternatives E and F recommend designation of the entire 13 miles as Scenic because it fits the theme of those alternatives.

# Wild and Scenic Rivers Eligibility Study COPPER RIVER DELTA Chugach National Forest



0mi 10mi

## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Copper River Lower</b>
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**Description**

The lower section of the Copper River is located within the Copper River and Copper River Delta Provinces. The eligible river segment is 25.3 miles long.

The Copper River Delta is part of Western Hemisphere Shorebird Reserve Network. Moose, eagles, brown bear, swans and geese use the area along the river. The lower portions of the Delta and mudflats are used by migrating shorebirds. The Forest Service as per ANILCA direction has established this area as a fish and wildlife management area. The Copper River has unique drifting sand dune habitats within the channel banks that support a variety of wildlife species. Waterfowl abound on the Delta; ducks and geese may be seen in nearly every pond. Common ducks are mallards, pintails, widgeon, and teal. The Delta is the only known breeding area for dusky Canada geese. The Delta also supports more than ten percent of the world population of trumpeter swans. During the summer months, many ponds host a stately pair of trumpeter swans raising their young. In the fall the Delta is a staging area for waterfowl preparing for their flight south; geese and cranes pass overhead in V formation. Bald eagles are common and other birds of prey include owls and hawks. Associated seabirds including gulls, terns, and jaegers frequent the intertidal areas. Shorebirds such as snipe, yellow-legs, dowitchers, sandpipers, and phalaropes nest in the rich wetlands. Wildlife include moose, brown and black bear, beavers, mink, otter, and other small furbearers.

Dolly Varden char and cutthroat trout are found in most streams. Candlefish (eulachon) spawn in several rivers in spring and provide an important food source to hungry eagles and other predators.

**Eligibility**

The outstandingly remarkable values associated with the lower section of the Copper River are scenery, visual features, historic and cultural values, fisheries and wildlife values, and geologic feature.

**Classification**

Wild River for 24.3 miles and Scenic River for 1 mile (within ½ mile of the Copper River Highway).

**Alternatives**

Alternatives E and F: Recommendation of 24.3 miles as Wild and 1 mile (near the road) as Scenic.



### Suitability

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Considering just the river channel of the lower Copper River resulted in no recognition of wildlife values as outstandingly remarkable. Because the Copper River Delta is known for its status as a world-class wetlands area the Wild and Scenic River interdisciplinary team recommended that the Copper River - lower complex be identified as an eligible segment. Thus, the complex identified includes much of the relatively flat wetlands area extending to the Alaganik Slough on the west side and a more narrow section of lowlands on the east side of the river nearly up to a point where the river channel begins to narrow and is more confined.

Outstandingly remarkable values: Scenery and Visual Features - The Copper River Delta complex is bisected by the massive Copper River and encompasses an area of outstandingly remarkable scenic quality. An area rich in patterns and textures created by the many braided river channels, the Delta is the most unique landscape in the Pacific Gulf Coastal Forest-Meadow Province. Rising gently out of the Gulf of Alaska and bounded on the north by the steep Chugach Mountains, the flatness of the Delta combined with the many river channels and vegetation patterns create a landscape filled with contrasts.

Childs Glacier is unique glacial feature attracting visitors from outside of the geographic region and receives national and international visitation. This recreation site is the most heavily used recreation site on the 700,000-acre Copper River Delta. Approximately 8,000 people visit the site yearly. Use has doubled in the past 5 years. The Glacier is only 1/4 mile away from the viewer. The Glacier and recreation site are easily accessible via the Copper River Highway. The recreation site itself is fully accessible, and designed to American with Disabilities Act specifications.

The Delta is geologically unique because it is the largest contiguous wetland area remaining on the west coast of the United States. The sediment load of the coastal rivers and streams is very high and the sedimentation rate seaward is rapid. Near shore deposits are as much as 600 feet thick. Holocene longitudinal sand dune ridges as high as 270 feet exist on the Delta. Dunes are nourished by sustained, unidirectional, high-velocity winds that blow down the Copper River canyon, especially during spring and fall. The Delta area was uplifted 6 to 13 feet during the 1964 earthquake. Since the earthquake, the area has been subsiding, at a rate of 9.7 millimeters annually. Scientists do not have a clear understanding of why this is happening. The Delta contains a number of terminal and lateral moraines. The Martin River terminal moraine is at least 1,000 years old. Moraines are deposited during glacial retreat. Major thrust faults and strike slip faults related to an active tectonic regime dissect and border the Delta. These include the Martin River Fault, the Chugach Fault, the Eyak and Cordova Faults, Scott Glacier lineament, the Bagley Fault, and the Ragged Mountains thrust fault. The Bagley Fault is a part of the Contact Fault System that separates the two major rock groups, the Valdez group (north) and the Orca group (south).

The 300-foot face of Childs Glacier is a remarkable and unique glacial feature. The Copper River, the third largest river in Alaska, narrows to only ¼ mile width in this section of river carving off one mile of the front of Childs Glacier forming a 300-foot wall of ice. The dynamic interactions of two major natural forces meet at the interface of Childs Glacier and the Copper River. Here, small to massive chunks of ice cascade into the water below with spectacular crashes and impressive resounding groans, and gun-like booms.

The Copper River and its drainage basins on the Chugach National Forest are uninventoried for cultural/historic values with four minor exceptions. These are: 1) the Copper River and Northwestern Railway (Copper River Highway) (state owned), 2) the Million Dollar Bridge (state owned), 3) the construction camps used for bridge construction, and 4) Abercrombie Rapids and siding above (upstream) from the bridge (state owned). The Alaska State Office of History and Archeology archeologists have completed inventories along the Copper River Highway and the Forest archeologist inventoried the access road, parking area and trail system for the (day use area) facility at the Million Dollar Bridge. Although uninventoried, a small remnant island at the mouth of the Copper River once served as the base for a colonial Russian Trading Post and later as the site for a salmon cannery. The Copper River is important in Native folklore as a transportation corridor in historic times and as an important salmon stream whose importance to west coast economics is still significant today.

Fisheries values are of national significance due to numbers of chinook and sockeye that use the river as a thoroughfare to interior Alaska. Streams, ponds, and sloughs provide spawning and rearing habitat for large numbers of sockeye and coho salmon. Adult sockeye and coho can be seen spawning during the late summer and fall months.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the outstandingly remarkable wetlands habitat area include Eyak Corporation, State of Alaska and municipality of Cordova (airport), and CAC. Other lands have been selected or overselected but not conveyed.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on federal land that would be curtailed by designation. Designation as a Scenic River would limit road construction only to the extent that is required to protect the outstandingly remarkable river values, water quality or free-flow characteristics of the river. Management direction in Section 501(b) of ANILCA to provide for the conservation of fish and wildlife and their habitat may also influence future road construction proposals.

*Water Resources:* Designation as a Wild or Scenic River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* The Bureau of Land Management has designated the area east of the Copper River as a Favorable Petroleum Geological Province. Information currently available indicates that the area has a low potential for the production of oil and gas. Designation as a Wild River would withdraw the river corridor from mineral entry. Designation as a Scenic River would allow new mining claims within the river corridor with mitigation to protect river values.

*Timber:* Although the area is available for timber harvest scheduling in Alternatives A, B and No Action, the design of such must be consistent with the primary purpose of management for the area to conserve fish and wildlife habitat values. Designation as a Scenic River would allow for timber harvest consistent with the management purpose of conserving fish and wildlife and their habitats and protecting the outstandingly remarkable values, water quality and free-flow characteristics of the river. There are 30 acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* The primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b). Designation as a Wild or Scenic River would restrict fish enhancement opportunities somewhat, if project proposals involved water diversions of dams, but would otherwise be consistent with the purposes of ANILCA.

*Recreation, Scenery:* Designation as a Wild or Scenic River would have no effect on the outstandingly remarkable scenic resources. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b). A Scenic designation would not be a factor to be considered when choosing between possible access routes to the Bering River coalfields. A Wild designation would prohibit road construction in other areas.

**Suitability Factor #4: Public, state and local governmental interests.** Most of the outstandingly remarkable wetlands habitat area is located within the Alaska State Lands Management Unit 28 - Copper River Delta. In this unit, the state manages only the Copper River Highway right-of-way and the land beneath the Copper River as a navigable river. Most of the area with outstandingly remarkable wetlands habitat values is within the State Copper River Delta Critical Habitat Area (SCHA). The Alaska Department of Transportation and Public Facilities manage the Copper River Highway right-of-way.

State lands in this unit, except the right-of-way lands, are open to mineral entry. However, the area contains no areas with significant known mineral potential. Sand and gravel deposits occur along the highway corridor, and there is an area of low oil and gas potential north of Softuk Bar.

The state is a party to the Copper River Delta Fish and Wildlife Memorandum of Understanding for the Cooperative Management of the Copper River Delta Fish and Wildlife Management Area.

**Subunit 28B - Cordova Airport Selections** - State land selections are located northwest of the Cordova Airport and about four miles southeast of the airport. Both were selected for sand and gravel resources and possible landfills or light industrial uses. Sand and gravel extraction is allowed from these lands if consistent with the purpose of the SCHA.

**Subunit 28C - Flag Point** - State land located where the Copper River Highway meets the Copper River. Residents of Cordova for access to the river for commercial fishing and community recreation use the area. The land is suitable for commercial development and community recreation. The land will be retained in public ownership and managed for multiple uses. Management will emphasize continued use of the area for public access to the river. The land may be leased for commercial development consistent with this intent and consistent with the purposes of the SCHA. State lands in this subunit are open to mineral entry.

**Subunit 28D - Bering River Road Junction** - State lands in this subunit will be used for commercial development related to the two transportation corridors and the associated residences. State lands in this subunit are open to mineral entry.

**Subunit 28E - Copper River and Other Navigable Waters** - This subunit consists of the state owned land under the Copper River and other navigable water bodies upstream from the SCHA. These rivers remain open to mineral entry although the size of the rivers combined with the low probability of finding minerals makes mining very unlikely.

The existing Copper River Highway traverses this unit. Nothing in the management intent should be construed to obstruct upgrading the highway right-of-way as part of a road connection from Cordova to the existing highway system or to the Katalla-Bering River area.

**Summary** - The management intent for state lands in this area appears to be consistent with the purposes of designating the lower portion of the Copper River as a scenic river. If some of the commercial development described for subunit 28 C and D were implemented it may lower the potential classification to a Recreational River.

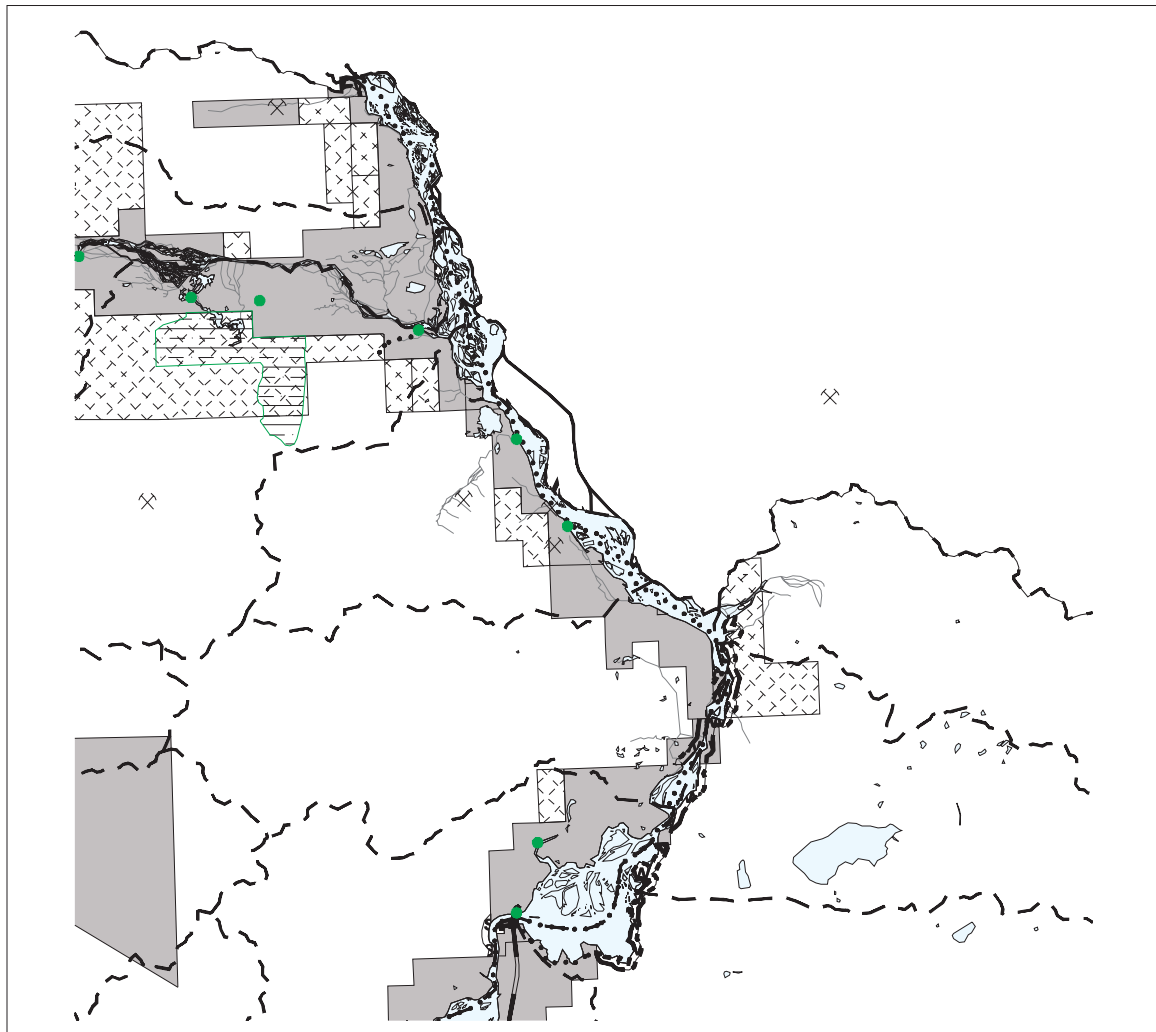
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	1,500
<b>Total</b>	<b>\$27,500</b>

**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend the lower section of the Copper River for designation. There was considerable opposition to congressional designations in Cordova because residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) - 1 and the 501(b) - 2 Management Area prescriptions and congressional direction in ANILCA. Alternatives E and F recommend the lower section of the Copper River for designation. Alternative F recommends that all eligible rivers on the Chugach National Forest be recommended for designation and Alternative E recommends most of the rivers.

# Wild and Scenic Rivers Eligibility Study COPPER RIVER Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Copper River Upper</b>
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**Description**

The upper section of the Copper River is located within the Copper River and Tasnuna Provinces. The eligible river segment is 51.3 miles long.

Only a minor portion of river above the 27-mile bridge flows by National Forest System lands, consisting primarily of small islands in river above Miles Lake, a parcel on the east shore across from Whiting Falls, and two 40-acre parcels by Child's glacier.

Moose, brown bear, eagles, goats, sea lions, beavers, ptarmigan, swans, and other waterfowl and birds can be viewed along the river.

Dolly Varden char and cutthroat trout are found in most streams. Candlefish (eulachon) spawn in several rivers in spring and provide an important food source to hungry eagles and other predators.

The Copper River and its drainage basins on the Chugach National Forest are uninventoried for cultural/historic values with four minor exceptions. These are: 1) the Copper River and Northwestern Railway (Copper River Highway)(state owned), 2) the Million Dollar Bridge (state owned), 3) the construction camps used for bridge construction, and 4) Aberchrombie Rapids and siding above (upstream) from the bridge (state owned). The Alaska State Office of History and Archeology archeologists have completed inventories along the Copper River Highway and the Forest archeologist inventoried the access road, parking area and trail system for the (day use area) facility at the Million Dollar Bridge.

**Eligibility**

The outstandingly remarkable values associated with the upper section of the Copper River are scenery and visual features, recreation value and fisheries values.

**Classification**

Wild River (above the bridge).

**Alternatives**

Alternatives E and F: Recommendation of the entire 51.3 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Outstanding views of Childs Glacier calving, distance views of mountains, steep sloped mountains adjacent to river. Unique views of river cutting into active glacier causing frequent and large calving and waves across river are seen from the day use area on National Forest System land across from the face of the glacier.

From Chitna to Childs/27 Mile Bridge is a popular recreational float. The Childs Glacier day use area is popular for viewing glacier calving, picnicking. Numerous camping, hunting, fishing, wildlife-viewing opportunities exist in the area. The area has pristine quality about it. It is generally undeveloped with numerous

panoramic, primitive landscapes and beautiful views. It flows through mountains, glaciers, and intercepts other major river systems. It is the longest navigable river in region. It is the third largest river system in Alaska.

Fisheries values are of national significance due to the numbers of chinook and sockeye that use the river as a thoroughfare to the interior of Alaska. Streams, ponds, and sloughs provide spawning and rearing habitat for large numbers of sockeye and coho salmon. Adult sockeye and coho can be seen spawning during the late summer and fall months.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the river corridor include Eyak, Tatitlek, and CAC. Other lands have been selected or overselected but not conveyed.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There is a long-standing proposal to connect Cordova with the Richardson Highway via the Copper River Highway.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power because there are no proposals for such development contained in Forest Service land status records and it would not be compatible with ANILCA direction to conserve fish and wildlife and their habitats.

*Mineral Resources and Geology:* **The portions of the upper Copper River on National Forest System lands is withdrawn from mineral entry (ANILCA Sec 502). These lands are available for the** removal of nonleasable minerals from the lands in the manner prescribed by Reorganization Plan Numbered 3 of 1946 and the Act of March 4, 1917 (39 Stat. 1150; 15 U.S.C. 520), and the removal of leasable minerals from such lands in accordance with the mineral leasing laws. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Although the area is available for timber harvest scheduling in Alternatives A, B and No Action, the design of such must be consistent with the primary purpose of management for the area to conserve fish and wildlife habitat values. Designation as a Wild River would allow for timber harvest consistent with the primary management purpose of conserving fish and wildlife and their habitats and protecting the outstandingly remarkable values, water quality and free-flow characteristics of the river. There is no land within the river corridor that is tentatively suitable for timber harvest.



*Fisheries and Wildlife:* The primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b). Designation as a Wild River would restrict fish enhancement opportunities somewhat if proposed projects involved water diversions or dams but would otherwise be consistent with the purposes of ANILCA.

*Recreation, Scenery:* Designation as a Wild River would have no effect on the outstandingly remarkable scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b). A Wild designation would not be a factor to be considered when choosing between possible access routes to the Bering River coalfields.

**Suitability Factor #4: Public, state and local governmental interests.** A strong interest in this area is related to support of or opposition to the road construction proposals to connect the Copper River highway to the existing state highway system or to the Katalla - Bering River area. The state maintains an interest in the opportunities for future improvement of a transportation link between Cordova and the Richardson Highway. Designation of the upper portion of the Copper River as a Wild River would not affect the road opportunity because the road could be built entirely on private land.

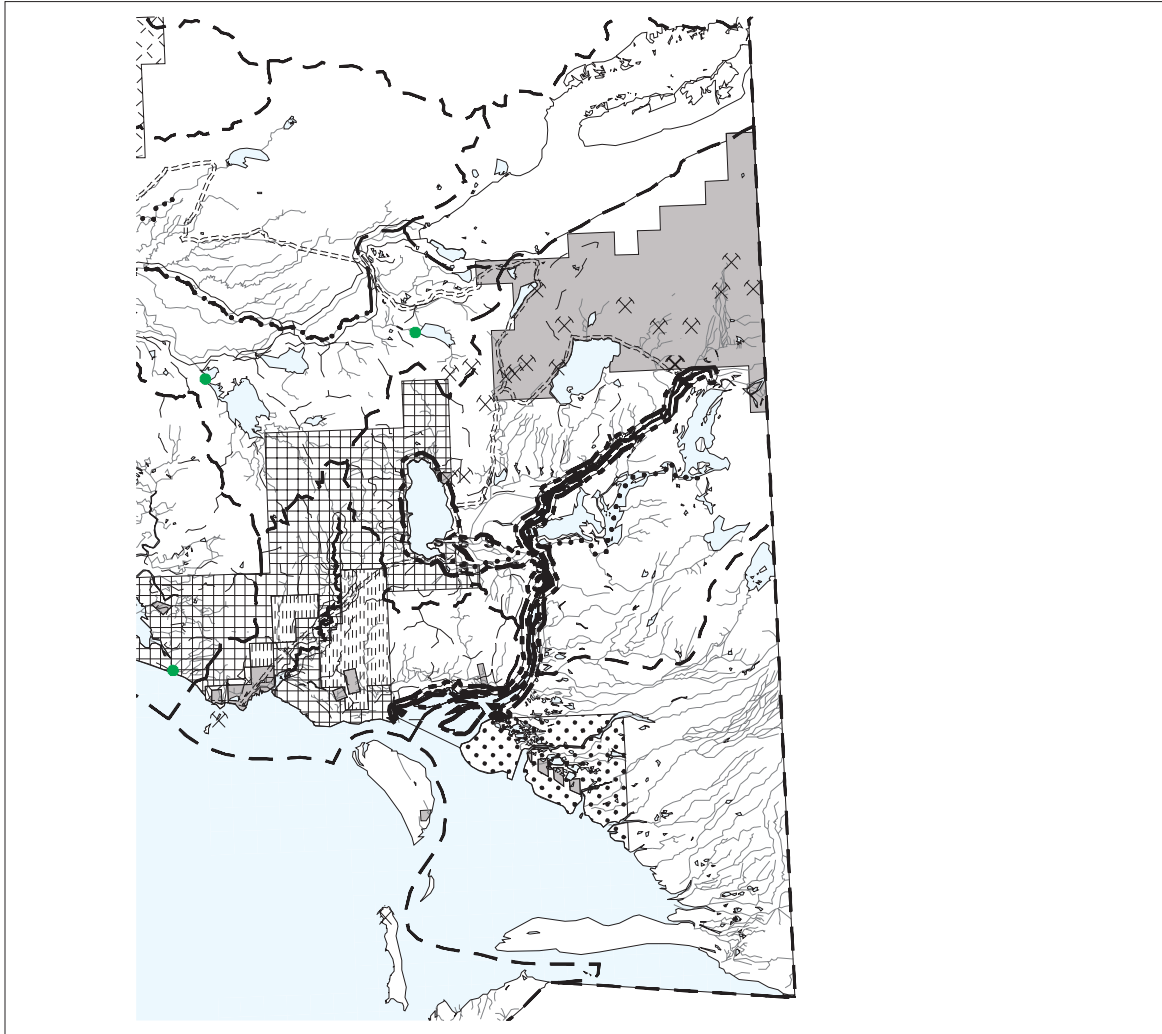
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	20,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$25,000</b>

**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend the upper section of the Copper River for designation. There was considerable opposition to congressional designations in Cordova because residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) - 1, the 501(b) - 2 and the 501(b) – Recommended Wilderness Management Area prescriptions and direction in ANILCA. Only a minor portion of river above the Million Dollar Bridge flows by National Forest System lands, consisting primarily of small islands in the river above Miles Lake, a parcel on the east shore across from Whiting Falls, and two 40-acre parcels by Childs Glacier. CAC owns the private land in the vicinity. They are opposed to any congressional designations adjacent to their lands. Alternatives E and F recommend the upper section of the Copper River for designation. Alternative F recommends that all eligible rivers on the Chugach National Forest be recommended for designation and Alternative E recommends most of the rivers be designated.

# Wild and Scenic Rivers Eligibility Study BERING LAKE AND BERING RIVER Chugach National Forest



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## LEGEND

- |                               |  |                               |
|-------------------------------|--|-------------------------------|
| Recreational Designation      | Selected Lands                                       | Existing Roads                |
| Scenic Designation            | Proposed Research Natural Areas                      | Potential Bering River Access |
| Wild Designation              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Other Ownership               | Watershed Boundaries                                 | Railroad                      |
| Katalla Exchange Area         | Association Boundaries                               | Trails                        |
| Conveyed to CAC - Oil and Gas | Streams  | Mining Claim as of 1994       |
| Conveyed to CAC - Subsurface  | Eligible Stream or Water Body                        | Recreation Sites              |



July 12, 2001

<b>Bering River and Lake</b>
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**Description**

Bering River and Lake is located within the Copper River Delta Province. The eligible river segment is 31.8 miles long.

Bering River and Lake is an important staging area for trumpeter swans: 450 in spring at one time, 100 in summer, and up to 800 in fall.

**Eligibility**

The outstandingly remarkable values associated with the Bering River and Lake are scenery, visual features, recreation value and fisheries values.

**Classification**

Wild for the upper 6.6 miles of Bering River and Lake and Scenic for the lower 25.2 miles of the Bering River and Lake.

**Alternatives**

Alternatives E and F: Recommendation of the entire 6.6 miles as Wild and the entire 25.2 miles Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Distant scenery includes outstanding views of the Wrangell-St. Elias Mountain range and Bering Glacier to the east and the Ragged Mountains to the west. The views of these landscape features provide rich color combinations with stark contrasts with blue skies, snow capped mountains, lush green vegetation in the foreground and White Mountains and glaciers in the background. Other visual features include abundant wildlife viewing opportunities. The still waters of Bering Lake offer scenic reflections of the surrounding landscapes.

A unique combination of wildlife, fisheries and scenery values, makes this area a regionally significant recreation place. It is easily accessible by plane yet it is a pristine, wild and remote setting.

Bering River and Lake is easily navigable with the potential to attract visitors from outside the geographic region. River related opportunities include sightseeing, wildlife observation, photography, fishing, hunting, and camping.

The area is of pristine quality. It is located on the East Delta and is extremely remote, with wilderness character, completely undeveloped. The area is very "wild" country. The presence of panoramic views is common with outstanding scenic quality. The diversity and abundance of wildlife including wolves,

Wolverine, brown bear, moose, mountain goats, trumpeter swans, dusky Canada geese, and bald eagles make this a popular area for Forest visitors. Although these species are not "unusual" for this region, wildlife is abundant in this area. Interesting natural features include Bering Glacier, Bering Lake, and surrounding mountainous terrain.

Bering River and Lake has outstandingly remarkable rearing habitat for sockeye and coho. All streams that feed into Bering Lake if viewed as a whole are regionally significant in terms of sockeye habitat. The Bering River is regionally significant up to the mouth of the Gandil as a thoroughfare.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the river corridor include Chugach Alaska Corporation (CAC) lands at the headwaters of the Bering River (referred to as the Bering River coal fields or Carbon Mountain) and at the mouth of the Bering River on the east side. State selected lands are located just west of Bering Lake.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* As per the 1982 CNI Settlement Agreement (CNI Agreement), Section 8 - Access to Bering River Coal Fields, pg. 45: "CNI shall have a right of access across land owned by the federal government to the Bering River coal fields in accordance with the rules and regulations of the Secretary of Agriculture and the following conditions and procedures." There shall be two right-of-way routes:

- a route generally linking the Copper River Highway (Alaska Route 10) with the Bering River coal fields, across federal lands drained by the Martin River; and,
- a route linking the coast of the Gulf of Alaska between Point Martin and Strawberry Point to the Bering River coalfields.

Additional conditions related to the construction of the road are also specified in the CNI Agreement.

An easement has been granted to CAC to construct the 30-mile Carbon Mountain Road (right-of-way route #1). Construction has begun on CAC lands, but not on National Forest System lands. Designation as a Wild River would prohibit road construction within a quarter of a mile of the river on federal lands.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* The Bureau of Land Management has designated the area east of the Copper River as a Favorable Petroleum Geological Province. Information currently available indicates that the area has a low potential for the production of oil and gas. In addition to the coalfields, CAC also received the subsurface gas and oil rights to 10,680 acres in the Katalla area and exchange preference rights to an additional 55,000 acres near Katalla.

If the federal government makes these 55,000 acres, or a part of it, available for oil and gas exploration and development, CAC will have the first opportunity to acquire these rights, by exchange.

The Revised Forest Plan maintains the allowance for the development in the future. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Although the area is available for timber harvest scheduling in Alternatives A, B and No Action, the design of such must be consistent with the primary purpose of management for the area to conserve fish and wildlife habitat values. There are 1,850 acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* The primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b). Designation as a Wild River would restrict fish enhancement opportunities somewhat if they involved water diversions or dams but would otherwise be consistent with the purposes of ANILCA and would help protect the outstandingly remarkable fisheries values.

*Recreation, Scenery:* Designation as a Wild River would have no effect on the outstandingly remarkable scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the ANILCA, Section 501(b). A Wild designation would not be a factor to be considered when choosing between possible access routes to the Bering River coalfields.

**Suitability Factor #4: Public, state and local governmental interests.** State of Alaska management intent for this area is described in the Prince William Sound Area Plan for State Lands. The Bering River and Lake area is located in Katalla Management Unit 29 of the State Area Plan. The first oil and gas strike in Alaska occurred at Katalla. Currently, private lands are being explored for oil at Katalla and commercial production of oil may occur within the next 10 years. If oil were discovered it would probably be transported by ship to a refining site. The off-loading site would most likely be near the old Katalla town site. A road easement has been authorized to allow CAC to build a road from the Copper River Highway to the coalfield. CAC has additional rights of access to the coast between Strawberry Point and Martin Islands. State management intent will maintain an option to build this road. The state selected uplands at Katalla and

the adjacent tidelands are reserved for commercial or industrial settlement required to support the various resource developments in the area.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur.

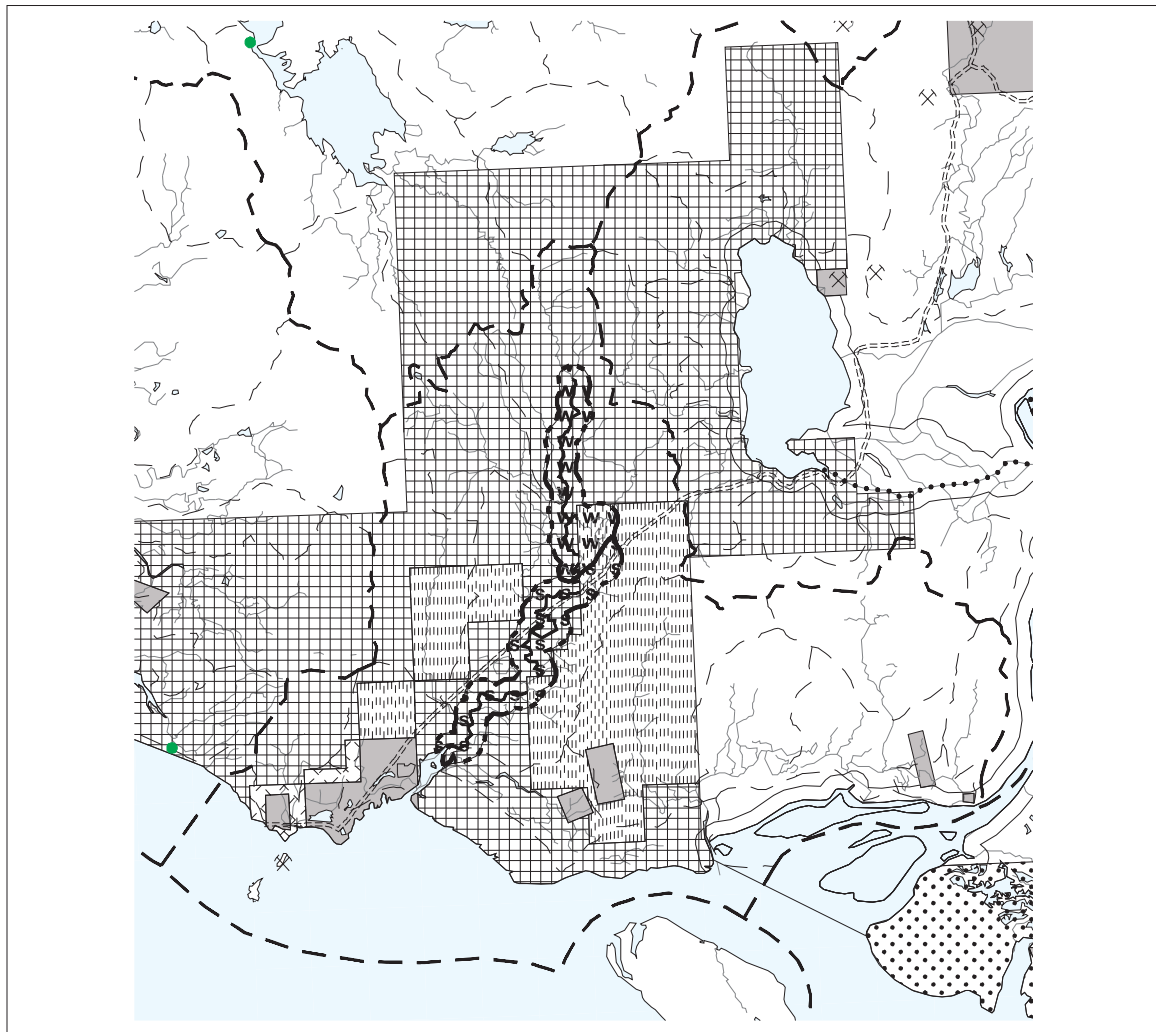
The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend the Bering River and Lake for designation. There was considerable opposition to congressional designations in Cordova because residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) - 1 Management Area prescription and congressional direction in ANILCA. Alternatives E and F recommend the lower 25.2-mile section of the Bering River and Lake for Scenic designation and the upper 6.6 miles for Wild designation. Alternative F recommends that all eligible rivers on the Chugach National Forest be recommended for designation and Alternative E recommends most of the rivers.

# Wild and Scenic Rivers Eligibility Study KATALLA RIVER Chugach National Forest



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## LEGEND

- |                               |  |                               |
|-------------------------------|--|-------------------------------|
| Recreational Designation      | Selected Lands                                       | Existing Roads                |
| Scenic Designation            | Proposed Research Natural Areas                      | Potential Bering River Access |
| Wild Designation              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Other Ownership               | Watershed Boundaries                                 | Railroad                      |
| Katalla Exchange Area         | Association Boundaries                               | Trails                        |
| Conveyed to CAC - Oil and Gas | Streams  | Mining Claim as of 1994       |
| Conveyed to CAC - Subsurface  | Eligible Stream or Water Body                        | Recreation Sites              |



July 12, 2001



<b>Katalla River</b>
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**Description**

The Katalla River is located within the Copper River Delta Province. The eligible river segment is 11.9 miles long.

Special values include distant views of Wrangell St. Elias Range, remote area recreation experience opportunities, and unique oxbow drainage pattern with clear water. The area was once an old town site of 10,000 people. Gifford Pinchot, the first Chief of the Forest Service, was burned in effigy over the Bering Coal field controversy. The first oil discovery in Alaska was made in this area. The river is pristine quality and undeveloped (the old Katalla town site is abandoned). The main access is a landing strip at mouth of Katalla River. One can land on beach across from mouth of Katalla River (from Steve Raney, Fishing and Flying). Boats and shallow draft barges can navigate into the mouth of the Katalla on high tide and good weather.

Although historic ruins abound in the Katalla area, and there is an initial railhead for a railroad to the Kenicott Copper Mine in the interior, no feature remains with any physical integrity except the cemetery. None of the known cultural resources of the Bering River country are related closely enough to a stream, nor have they met the distinction as a National Register of Historic Places property (with the exception of the Chilkat Oil Refinery) as to indicate they may have an outstandingly remarkable value. The old town site is privately owned.

**Eligibility**

The outstandingly remarkable value associated with the Katalla River is the fisheries resource value.

**Classification**

Wild River for the upper 4.8 miles of the river area that is roadless and Scenic for the lower 7.1 miles of the river.

**Alternatives**

Alternatives E and F: Recommendation of the entire upper 4.8 miles as Wild and the entire lower 7.1 miles as Scenic.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** The Katalla River is unique in this ecological province because of its diversity of fish species. All five species of salmon are present as well as cutthroat and rainbows/steelhead. It has high quality fisheries habitat with an ideal pool to riffle ratio. Stream flows are based on snowmelt and runoff instead of glacial input that is a unique characteristic for streams in this area. This characteristic results in a more stable channel and more defined floodplain than other rivers in area.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the river corridor include Chugach Alaska Corporation lands, reserved rights under the 1982 CNI Settlement Agreement, and private lands.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* As per the 1982 CNI Settlement Agreement, Section 8 - Access to Bering River Coal Fields, pg. 45: "CNI shall have a right of access across land owned by the federal government to the Bering River coal fields in accordance with the rules and regulations of the Secretary of Agriculture and the following conditions and procedures." There shall be two right-of-way routes:

- a route generally linking the Copper River Highway (Alaska Route 10) with the Bering River coal fields, across federal lands drained by the Martin River; and,
- a route linking the coast of the Gulf of Alaska between Point Martin and Strawberry Point to the Bering River coalfields.

Additional conditions related to the construction of the road are also specified in the CNI Agreement.

The road easement has been granted to allow CAC to build a road from the Copper River Highway to the coalfield. The route to the coast between Strawberry Point and Martin Islands has not been agreed upon. The Revised Forest Plan identifies for the two access routes to the Bering River coalfield described in the CNI Agreement.

Designation as a Wild River would prohibit road construction within a quarter of a mile of the river on federal lands.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* The Bureau of Land Management has designated the area east of the Copper River as a Favorable Petroleum Geological Province. Information currently available indicates that the area has a low potential for the production of oil and gas. In addition to the coalfields, CAC also has reserved oil and gas rights under the CNI Agreement to 10,680 acres in the Katalla area and exchange preference rights to an additional 55,000 acres in the area.

The reserved oil and gas rights under the CNI Agreement are a valid existing right. The Revised Forest Plan maintains the allowance for mineral development in this area. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Although the area is available for scheduled timber harvest in Alternatives A, B and No Action, the design of such must be consistent with the primary purpose of management for the area to conserve fish and wildlife habitat values. Designation as a Wild River would allow for timber harvest consistent with the primary management purpose of conserving fish and wildlife and their habitats and protecting the outstandingly remarkable values, water quality and free-flow characteristics of the river. There is no land within the river corridor that is tentatively suitable for timber harvest.

*Fisheries and Wildlife:* The primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the Alaska Lands Act, Section 501(b). Designation as a Wild River would restrict fish enhancement opportunities somewhat if they involved water diversions or dams but would otherwise be consistent with the purposes of ANILCA.

*Recreation, Scenery:* Designation as a Wild River would have no effect on the scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area are expected since the primary purpose of management activities in this area is for the conservation of fish and wildlife and their habitats as per the Alaska Lands Act, Section 501(b).

**Suitability Factor #4: Public, state and local governmental interests.** The first oil and gas discovery in Alaska occurred at Katalla. Currently, there is a proposal to explore for oil near Katalla. If oil were discovered it would probably be transported by ship to a refining site. The off-loading site would most likely be near the old Katalla town site. A road easement has been granted to allow CAC to build a road from the Copper River Highway to the coalfield. State management intent will maintain an option to build this road. The best location for the old Katalla town site has not yet been determined. The state selected uplands at Katalla and the adjacent tidelands are reserved for commercial or industrial settlement required to support the various resource developments in the area.

There is a Forest Service easement on the old railroad grade that runs from the Katalla town site to the northeast. A private special use permit road runs from the head of Katalla Bay to the southeast to access private land located in Section 36.

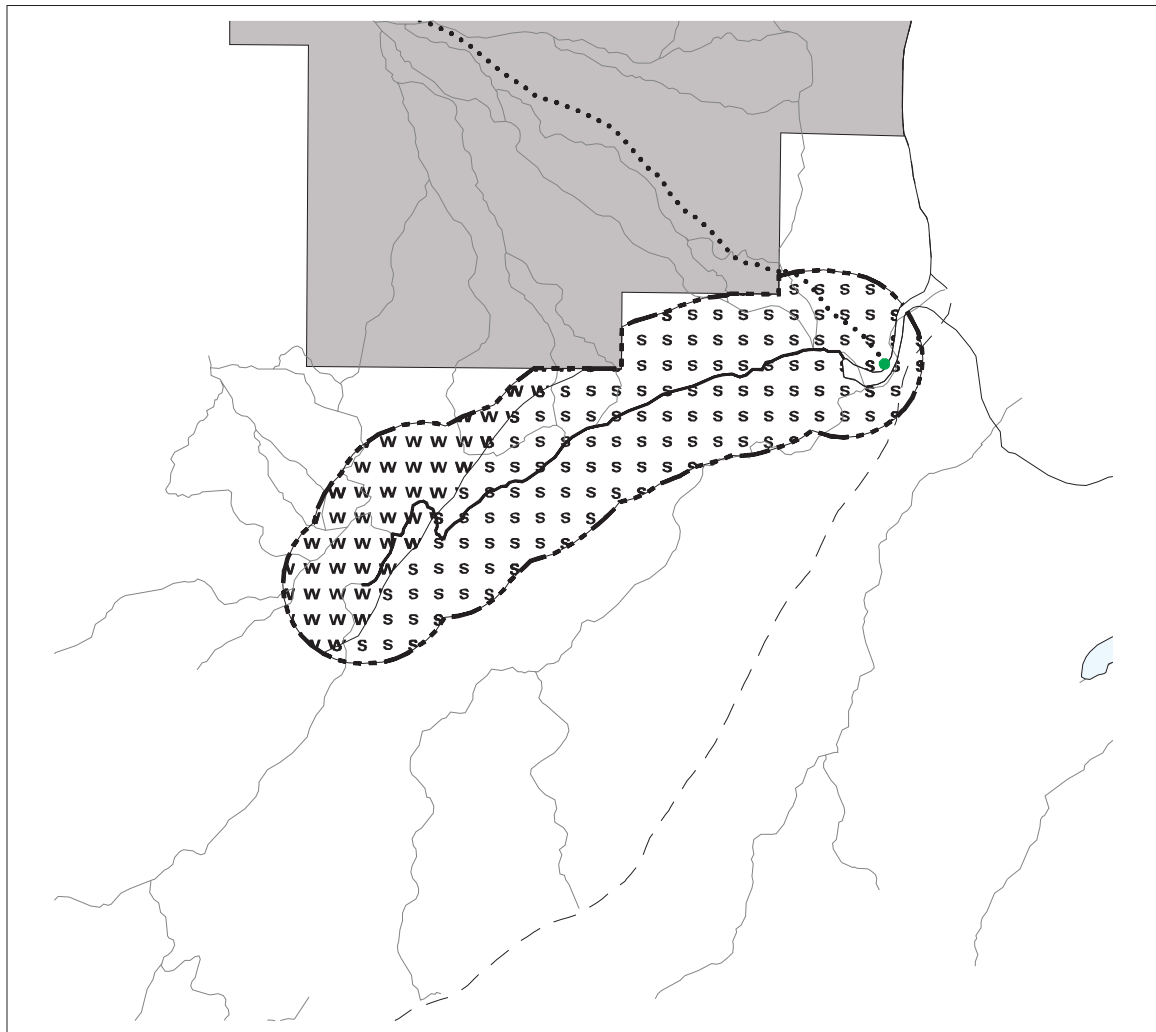
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

**Suitability and Nonsuitability Determinations:**

The Revised Forest Plan does not recommend the lower section of the Katalla River for designation. There was considerable opposition to congressional designations in Cordova because residents felt that future options for management of fish and wildlife habitat may be curtailed with such a designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the 501(b) - 1 Management Area prescription and congressional direction in ANILCA. Alternatives E and F recommend the lower section of the Katalla River for designation. Alternative F recommends that all eligible rivers on the Chugach National Forest be recommended for designation and alternative E recommends most of the rivers.

# Wild and Scenic Rivers Eligibility Study NELLIE MARTIN RIVER Chugach National Forest



0mi 1mi

## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Nellie Martin River</b>
----------------------------

**Description**

The Nellie Martin River is located within the Prince William Sound Islands Province. The eligible river segment is 2 miles long.

The river is a popular place for sport fishing. Most fishing takes place in uplifted tidelands. The area is accessible by plane or boat. The Forest Service cabin in the area is the most heavily used cabin on the Cordova Ranger District, in terms of total use per year.

**Eligibility**

The outstandingly remarkable value associated with the Nellie Martin River is the fisheries resource value.

**Classification**

Scenic River for 1.6 miles (up to 1/4 mile above the Montague temporary road) and Wild River for 0.4 miles (up to the two mile mark). Note: since the eligibility study was completed the Montague road was obliterated and thus the entire 2-mile segment of the river would now qualify for a Wild classification.

**Alternatives**

Alternatives E and F: Recommendation of the lower 1.6 mile section of the rivers as Scenic and the upper 0.4 mile section as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Fisheries values of the Nellie Martin River are not typical of island streams due to its length and coho spawning and rearing habitat it provides (including Braided Creek). The island populations may evolve differently than mainland populations in terms of the timing of the runs. It is one of the 4 or 5 coho runs in Prince William Sound.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** Lands in other ownership adjacent to the river corridor include CAC lands.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* The old Montague road crossed the Nellie Martin River near the mouth and provided a transportation link between the timber resources near Patton bay and the log-transfer facility at Macleod Harbor. Thus, the Nellie Martin River was classified as a Scenic River up to 1/4 mile above the road crossing and classified as Wild up to the two-mile mark. Since the eligibility study was completed the Montague road was obliterated and this river would now qualify for a Wild designation. A Wild River designation would prohibit future Forest Service road construction within 1/4 mile of the eligible section of the river.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Most state and federal lands in this area are open to mineral entry; however, the area contains no areas of significant known mineral potential. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Designation of the lower river as a Scenic River would only limit timber harvest to the extent necessary to maintain the outstandingly remarkable fisheries resources. Timber harvest would be further limited if the upper portion or the entire river if designated as a Wild River because road construction would not be allowed within ¼ mile of the eligible section of the river.

Lands in this area are open to scheduled timber harvest in Alternatives A and B. There are 50 acres of land that are tentatively suitable for timber harvest within the river corridor.

*Fisheries and Wildlife:* The Revised Forest Plan applies the Fish and Wildlife Conservation Management Area prescription to Montague Island. Designation of the river would help protect the outstandingly remarkable fisheries values but would restrict the construction of some instream fish habitat enhancement structures if they involved water diversions or dams.

*Recreation, Scenery:* Designation as a Wild River would have no effect on recreation and scenery. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Little change in the outstanding values of the area is expected. There are 50 acres of land that are tentatively suitable for timber harvest within the river corridor in Alternatives A and B. The State Area Plan emphasizes the need to protect opportunities for fishing and hunting use.

**Suitability Factor #4: Public, state and local governmental interests.** The Nellie Martin River is located within Montague Island Management Unit 24 of the State Area Plan. State management intent for the area is to retain it in public ownership to be managed for multiple uses. Management will emphasize protecting existing access points on state land, anchorages, and federal upland owners; and maintaining the fish and wildlife habitat and harvest areas. The development of additional access and public facilities that increase access or the recreation or hunting carrying capacity are encouraged on state land in this unit. Examples include mooring buoys, airstrips (including beacon strips), and public use cabins. Float lodges may be authorized on state tidelands in this unit if, after

consideration of the available upland services including outfitter or guide camps, the land manager in consultation with DPOR, ADF&G, and the Forest Service determines that the float lodge services would provide public benefits. Float-lodges should be located where they will not displace existing public use. Therefore they will not be situated adjacent to existing anchorages or near frequently used hunting or public-use areas.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

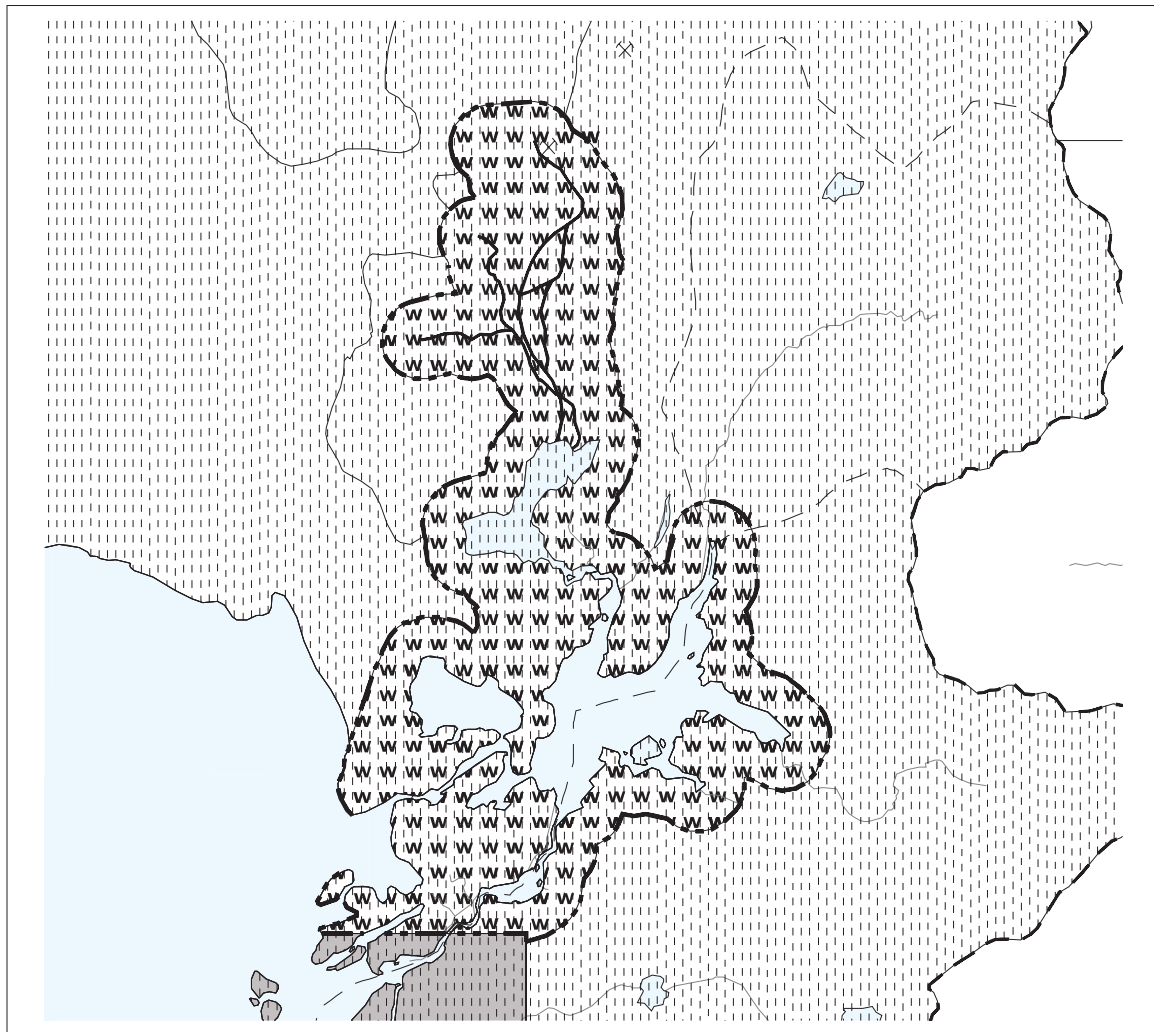
General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

**Suitability and Nonsuitability Determinations:**

The Nellie Martin River is not recommended for designation in the Revised Forest Plan. Relatively few comments were received on the Nellie Martin River expressing support for to designation. Its outstandingly remarkable values, water quality and free-flow would likely be protected with the application of the Fish and Wildlife Conservation Management Area prescription.



# Wild and Scenic Rivers Eligibility Study NUMBER 1 Chugach National Forest



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## LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Number 1 River</b>
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**Description**

Number 1 River is located within the Chugach Icefields Province. The eligible segment of the river is 6.7 miles in length. The river is located on the east side of Columbia Glacier about 18 miles west of Valdez.

**Eligibility**

The outstandingly remarkable values associated with the Number 1 River are recreational whitewater boating and geologic values.

**Classification**

Wild for 6.7 miles of the Number 1.

**Alternatives**

Alternative F: Recommendations of the entire 6.7 miles as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** This river is newly revealed after recession of the Columbia Glacier. Part of the river still flows beneath glacier ice between Lake Number 1 and Boreas Lake and also between Boreas Lake and Great Nunatak. Terrain is wild, pristine and glaciated or recently so.

Number 1 River is unique in revealing the dramatic recent recession of Columbia Glacier, which uncovered an under ice segment of the river at the southeast toe of the Great Nunatak and made more of the river runnable by raft or kayak. In a short distance, the river travels from high alpine terrain thickly inhabited by mountain goats, to tidewater thick with icebergs, seals and sea otters. In between, the river threads a chain of three lakes and easy whitewater (Class I and II) with short portages of two visually spectacular waterfalls. This river was run June 1994 with helicopter access (20 minutes from Valdez) but would also be accessible by float or wheelplane. The river can be run in one day by kayak all the way to Heather Island.

It is outstandingly remarkable for geologic features. Along the perimeter of Columbia Glacier near the terminus one can observe newly exposed geology. The rock is fresh (unweathered) and the clarity and level of detail of small features in the rock is incredible. The delicate turbidite features of the Valdez rocks are in striking evidence. The normal condition of bedrock exposures is a weathered surface that one must chip away a piece to get at fresh rock. Weathering changes the color and conceals texture and features. The sheer scale of the geology exposed at the newly revealed bedrock along side Columbia Glacier is awesome. Near the mouth of Number 1 River, at Heather Island, the exposed bedrock reveals massive greywacke rock with intraformational clasts of argillite. This condition occurred as sediment cascading down the continental slope ripped up mud chunks (argillite) and carried it along into deep water. The sequence is preserved when these sediments are deeply buried in the earth, and the heat and pressure converts the material to rock. The clarity with which these

features are revealed on newly exposed bedrock, allows geologists to study the geologic record more efficiently. The opportunity to study the geologic record at such a grand scale and such exquisite level of detail is rare. A remarkable characteristic of the river, is the up close views of the retreat of Columbia Glacier. Newly exposed bedrock is only a part of the picture. The glacial features themselves, the vegetative sequences, glacial striations, brand new rivers and lakes, and the rugged nunataks, are outstanding. The dramatic retreat of Columbia Glacier has worldwide attention from the scientific community. The U.S. Geological Survey is especially active in studying this phenomenon.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land.** There are no lands in other ownership adjacent to the river corridor.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.**

*Transportation:* There are no known transportation corridor plans on federal land that would be curtailed by designation. Because Number 1 River includes mostly rock, ice and steep and remote terrain, it is unlikely that a road would ever be proposed within the eligible corridor of the river.

*Water Resources:* Designation as a Wild River would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Designation as a Wild River would withdraw the river corridor from mineral entry. Designation as a Wild River would probably have no effect on this outstandingly remarkable recreational whitewater boating value and Geologic feature.

*Timber:* Number 1 River is located within the Nellie Juan-College Fiord Wilderness Study Area and timber harvest would not be allowed until the wilderness issue was decided. Designation as a Wild River would have no effect on future timber harvest.

*Fisheries and Wildlife:* The eligible river corridor includes only ice fields and there is little wildlife habitat value. Designation as a Wild River would have no effect on future fisheries and wildlife habitat enhancement opportunities.

*Recreation, Scenery:* Designation as a Wild River would have no effect on scenic and recreational resource values. Some increase in recreation use would be likely, and requests by commercial outfitters and guides for use of the river corridor may increase.

*Historical/Cultural:* There are no known Historic/Cultural resources within the river corridor.

*Effects of Non-designation:* Little change in the outstanding values of the area is expected since the eligible river corridor includes no known commodity resource values and Number 1 River is located within the Wilderness Study Area. Potential future management activities would have little effect on this recreational whitewater boating and geologic feature.

**Suitability Factor #4: Public, state and local governmental interests.** The state has not identified this area for future development of transportation and other infrastructure and no communities are present in the area.

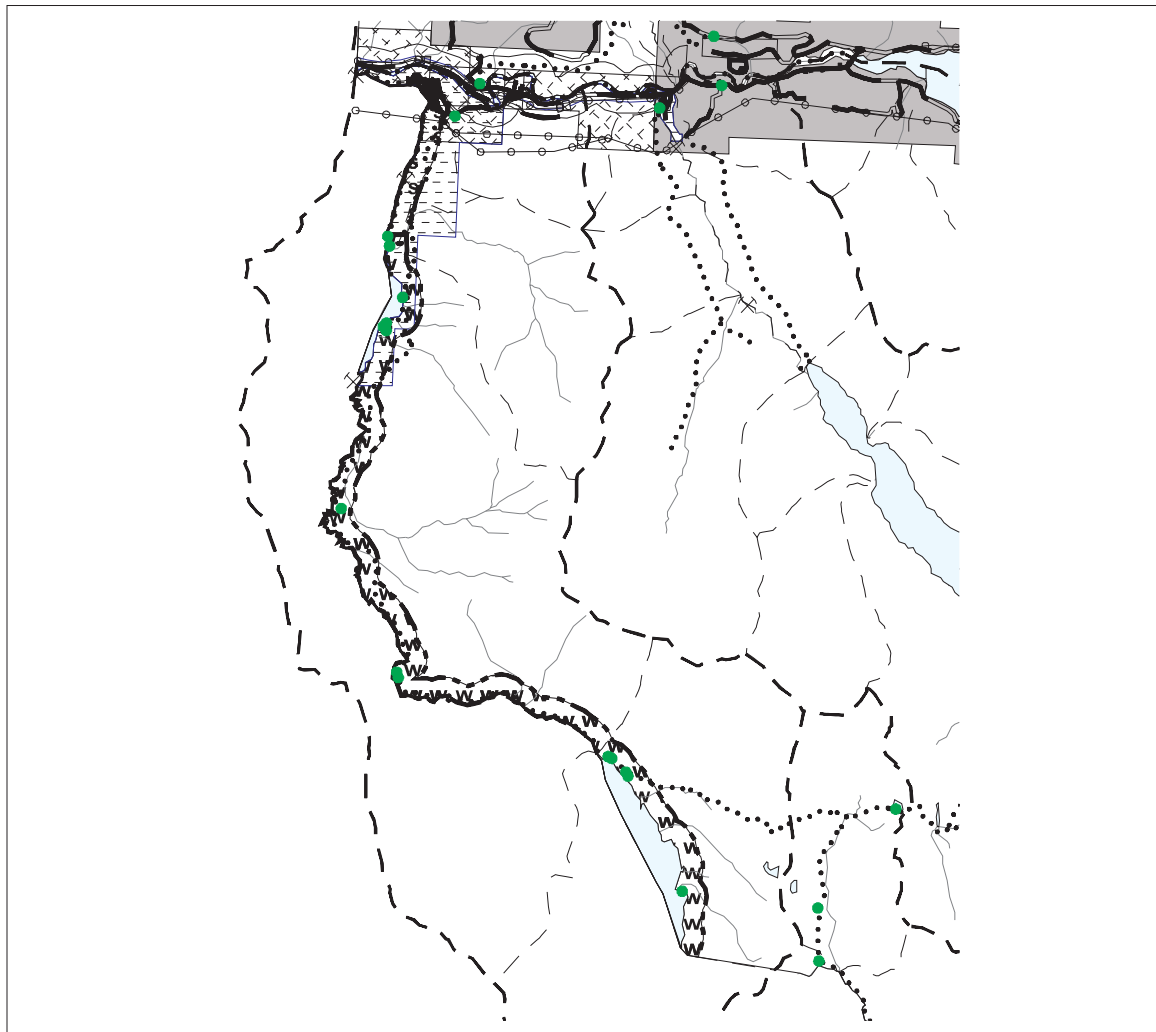
**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** No private lands would be acquired; no significant recreation or other developments would occur. The following are expected additional funding needs if the river were designated.

General Administration	Not Estimated
Cost of Implementation	\$ 5,000
Management Plan Development	10,000
Development Costs	0
Operation and Maintenance (annual)	0
<b>Total</b>	<b>\$15,000</b>

#### **Suitability and Nonsuitability Determinations:**

Number 1 River is not recommended for designation in the Revised Forest Plan. Relatively few comments were received on Number 1 River expressing support for designation. Its outstandingly remarkable values, water quality and free-flow would be protected with the application of the Wilderness and Wilderness Study Area Management Area prescription.

Wild and Scenic Rivers Eligibility Study  
 RUSSIAN RIVER, LOWER AND UPPER RUSSIAN LAKES  
 Chugach National Forest



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LEGEND

- |   |  |                               |
|---|--|-------------------------------|
| Recreational Designation                        | Proposed Research Natural Areas                      | Potential Bering River Access |
| Scenic Designation                              | Boundaries of Eligible Buffered Stream or Water Body | Powerline Corridors           |
| Wild Designation                                | Watershed Boundaries                                 | Railroad                      |
| Other Ownership                                 | Association Boundaries                               | Trails                        |
| Selected Lands                                  | Streams  | Mining Claim as of 1994       |
| Withdrawals                                     | Eligible Stream or Water Body                        | Recreation Sites              |
| Recommended Wilderness or Wilderness Study Area | Existing Roads                                       | Facilities                    |



July 12, 2001

<b>Russian River</b>
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**Description**

The Russian River is located within the Alaska Mixed Forest Province. The eligible river is 17.3 miles long.

The land at the headwaters of the Russian River and on the west side of the river is part of the Kenai National Wildlife Refuge. The Russian River is a clear-water stream located in the central Kenai Peninsula. The drainage includes two large lakes, Lower and Upper Russian Lakes. The river flows into the Kenai River between Kenai Lake and Skilak Lake.

**Eligibility**

The outstandingly remarkable values associated with the Russian River are the fisheries resource values and prehistoric values.

**Classification**

Scenic River for 3 miles up to the waterfall and Wild River for 14.3 miles above the waterfall. The river is accessible from the campground in two places by an aluminum and wood stairway. The banks of the river have undergone some development with the installation of gabions and other stabilization efforts. Above the campground the river is accessible only by trail. A fish ladder has been installed in this section of the river but is generally unobtrusive. A weir is located at the outlet of Russian Lake but is used only periodically.

**Alternatives**

Alternatives E and F: Recommendation of the entire upper 14.3 miles as Wild and the entire lower 3.0 miles as Scenic.

Preferred Alternative: Recommendation of the lower 4.9-mile section of the river, including Lower Russian Lake, as Recreational. Recommendation of the upper 12.4 miles of river above lower Russian Lake as Wild.

**Suitability**

**Suitability Factor #1: Characteristics that do or do not make the area a worthy addition to the National System.** Sockeye salmon, which provide the main fishery value, return to the Russian in two distinct runs, termed early and late-run. The early run arrives at the confluence around early June and remains for about two weeks. They have passed through the angling area by mid-July, and spawn almost exclusively above the Russian River falls. The late run sockeye arrive at the confluence by late July and are present in the angling areas through August. This late run has two components, with a portion of the run spawning in the upper Russian River, while a second segment spawns below the falls and is a component similar to the mainstream Kenai River sockeye.

This sockeye run is the largest and most dependable run of sockeye salmon within the Southcentral Alaska. It is remarkable in its availability, as it is the only large run of sockeyes readily accessible to the Anchorage urban area. The length of time the fish are available and the relative ease that they are caught also characterize it. This has made the Russian River and its confluence with the

Kenai River the personal use fishery for the 60 percent of the Alaska population that resides in the Southcentral region. The annual angler effort for this fishery exceeds 450,000 hours and annual harvest has ranged as high as 190,000 fish. The large numbers of anglers present in the small area, many times numbering in the hundreds provide a unique recreational viewing opportunity. In addition to the sockeye recreational fishery, a robust fishery exists for rainbow trout, Dolly Varden char and pink and coho salmon.

The Russian River is characterized by clusters of cache pits. Cultural evidence of prehistoric use is also abundant in other areas near the river. Some sites have been nearly destroyed by visitor's foot traffic. At the river's edge, below the falls, is an excellent location for observing and photographing the leaping fish but access to it is difficult and unsafe in its natural state. Over the peak of the ridge to the east of the falls overlook area, is a natural hanging valley, possibly carved in glacial times whose southern extremity shows evidence of prehistoric use. No testing has been done in this area. All such archaeological features are considered to be "contributing elements" to the Sqilantnu Archaeological District.

The Russian River, including the areas up to the approximate 500-foot contour interval to Lower Russian Lake, lies within the proposed revised boundaries of the Sqilantnu Archaeological District. Significant evidence of river-related occupation or use by Native Americans exists in this area.

**Suitability Factor #2: Current status of land ownership and use in the area including the amount of private land and the uses of such land:** The banks of the Russian River are Chugach National Forest lands on the east side and Kenai National Wildlife Refuge lands on the west side of the river.

**Suitability Factor #3: Foreseeable potential uses of the land and water that would be enhanced, foreclosed or curtailed by designation; and values which would be foreclosed or diminished if the area is not protected as part of the National System.** Past management direction has focused on recreation improvements in the Russian River campground and trail improvements near the Russian River. All existing improvements and potential improvements listed in the Revised Forest Plan would be compatible with a Wild classification for the upper river and a Scenic or Recreational classification for the lower river.

*Transportation:* There are no known transportation corridor plans within the eligible river corridor area that would be curtailed by designation.

*Water Resources:* Designation would not likely affect the future availability of water supplies or electric power based upon a review of Forest Service land status records.

*Mineral Resources and Geology:* Lands on the west side of the river are closed to mineral entry because of the Wilderness status on U.S. Fish and Wildlife Service lands and on the east side of the river the National Forest System lands are open to mineral entry. Designation as a Wild River would withdraw the river corridor from mineral entry.

*Timber:* Lands in this area are closed to timber harvest in all alternatives on Chugach National Forest lands and closed to timber harvest on the U.S. Fish and Wildlife Service Refuge lands. Designations as a Wild and Scenic River would not affect the status of the 150 acres of tentatively suitable timber harvest land within the river corridor.

*Fisheries and Wildlife:* In the Revised Forest Plan the application of the Brown Bear Core Management Area prescription would protect fisheries and wildlife habitat values. Designation of the river corridor area would not affect fish and wildlife habitat values or enhancement opportunities unless proposals involved water diversions or dams.

*Recreation, Scenery:* In the Revised Forest Plan the surrounding area will be managed as a Brown Bear Core Management Area. The goal of this management area is to confine public use to the developed campground areas as much as possible to reduce the incidence of conflicts between humans and bears. A Scenic designation would allow campground development if screened from the river and a Recreational designation would have few restrictions on campground development. Some increase in recreation use may be likely, and requests by commercial outfitters and guides for use of the river area may increase but the river-related resource values could be maintained.

*Historical/Cultural:* Increased public use that could result from designation may have adverse impacts on known and undiscovered historic and cultural values. Impacts may result from souvenir collecting, looting, and inadvertent disturbance of cultural sites. However, designation could provide additional opportunities for interpretation of historic and cultural resources.

*Effects of Non-designation:* Outstandingly remarkable fisheries and prehistoric resource values would likely be maintained even if the river were not designated. Wilderness designation on the west side of the river and management direction in all alternatives on National Forest System lands will protect river related resource values. Designation as a Wild and Scenic River would provide additional protection of river values especially on the east side of the river.

**Suitability Factor #4: Public, state and local governmental interests.** Kenai National Wildlife Refuge lands on the west side of the river are managed by the U.S. Fish and Wildlife Service as Wilderness. They have expressed their support for a Wild and Scenic River recommendation.

**Suitability Factor #5: Estimated cost of land acquisition and management as a Wild and Scenic River.** The following are expected additional funding needs if the river were designated.

General Administration	Not estimated
Cost of Implementation	\$10,000
Management Plan Development	15,000
Development Costs	0
Operation and Maintenance (annual)	5,000
<b>Total</b>	<b>\$30,000</b>



**Suitability and Nonsuitability Determinations:**

The Russian River is recommended for designation in the Revised Forest Plan. Public comments received both during the scoping period and on the Draft Environmental Impact Statement and the Proposed Revised Forest Plan were primarily supportive of recommending the Russian River to be added to the National Wild and Scenic Rivers System. Classification of the lower portion of the Russian River as Recreational is consistent with current and future expected use patterns in the area. A Recreational classification would allow some development of recreation facilities and new trails to accommodate river users. Designation of this river is consistent with the Wilderness management objectives of the U.S. Fish and Wildlife Service who manages the lands on the west side of the river. Comments on the Proposed Revised Forest Plan from the U.S. Fish and Wildlife Service requested that the upper portion of the river be recommended as a Wild classified river. The Russian River is also recommended for designation in Alternatives E and F.